

# **FCC Test Report**

Report No.: AGC07434250348FR03

FCC ID : 2ARXB-B1C

**APPLICATION PURPOSE**: Original Equipment

**PRODUCT DESIGNATION**: Label Printer

**BRAND NAME** : NIIMBOT

**MODEL NAME** : NIIMBOT B1, B1 SE, NIIMBOT B1\_X, NIIMBOT B1\_A

APPLICANT : Wuhan Jingchen Intelligent Identification Technology Co.,

Ltd.

**DATE OF ISSUE** : May 08, 2025

**STANDARD(S)** : FCC Part 15 Subpart C §15.225

**REPORT VERSION**: V1.0

Attestation of Global Compliance (Shenzhen) Co., Ltd



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# **Report Revise Record**

Report Version	Revise Time	Issued Date	Valid Version	Notes	
V1.0	/	May 08, 2025	Valid	Initial Release	



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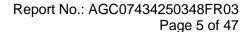
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# 1. General Information

Applicant	Wuhan Jingchen Intelligent Identification Technology Co., Ltd.
Address	No. 5, Creative Workshop, Creative World, Yezhihu West Road, Hongshan District, Wuhan, China
Manufacturer	Wuhan Jingchen Intelligent Identification Technology Co., Ltd.
Address	No. 5, Creative Workshop, Creative World, Yezhihu West Road, Hongshan District, Wuhan, China
Factory	Dongxihu branch of Wuhan Jingchen Intelligent Identification Technology Co., Ltd.
Address	No. 20, Xincheng eighteen Road, Changqing Street, Dongxihu District, Wuhan, Hubei Province, China
Product Designation	Label Printer
Brand Name	NIIMBOT
Test Model	NIIMBOT B1
Series Model(s)	B1 SE, NIIMBOT B1_X, NIIMBOT B1_A
Difference Description	All the same except for the model name.
Date of receipt of test item	Mar. 25, 2025
Date of Test	Apr. 07, 2025~May 08, 2025
Deviation from Standard	No any deviation from the test method
Condition of Test Sample	Normal
Test Result	Pass
Test Report Form No	AGCER-FCC-NFC-V1
-	

Note: The test results of this report relate only to the tested sample identified in this report.

Prepared By	Coli	
	Cici Li (Project Engineer)	May 08, 2025
Reviewed By	Bibo zhang	
	Bibo Zhang (Reviewer)	May 08, 2025
Approved By	Angole Li	
	Angela Li (Authorized Officer)	May 08, 2025



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# 2. Product Information

# 2.1 Product Technical Description

Equipment Category	Near Field Communication (NFC)
Operation Frequency	13.56MHz
Hardware Version	V6.01
Software Version	V6.10
Modulation Type	ASK
Field Strength of Fundamental	68.61dBµV/m (Peak)
Antenna Designation	Induction Coil Antenna
Antenna Gain	0dBi
Power Supply	DC 7.4V by battery or DC 5V by adapter

# 2.2 Test Frequency List

Frequency Band	Channel Number	Frequency	
13.110~14.010 MHz	01	13.56 MHz	



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# 2.3 Related Submittal(S) / Grant (S)

This submittal(s) (test report) is intended for FCC ID: **2ARXB-B1C**, filing to comply with Part 2, Part 15 of the Federal Communication Commission rules.

#### 2.4 Test Methodology

The tests were performed according to following standards:

No.	Identity	Identity Document Title			
1	FCC 47 CFR Part 2	Frequency allocations and radio treaty matters; general rules and regulations			
2	FCC 47 CFR Part 15	Radio Frequency Devices			
3	ANSI C63.10-2013	American National Standard for Testing Unlicensed Wireless Devices			

#### 2.5 Special Accessories

Not available for this EUT intended for grant.

#### 2.6 Equipment Modifications

Not available for this EUT intended for grant.

#### 2.7 Antenna Requirement

# **Standard Requirement**

#### 15.203 requirement:

An intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall 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, the manufacturer may design the unit so that a broken antenna can be replaced by the user, but the use of a standard antenna jack or electrical connector is prohibited.

#### **EUT Antenna:**

The non-detachable antenna inside the device cannot be replaced by the user at will. The gain of the antenna is 0dBi.



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#### 3. Test Environment

# 3.1 Address of The Test Laboratory

Laboratory: Attestation of Global Compliance (Shenzhen) Co., Ltd.

Address: 1-2/F, Building 19, Junfeng Industrial Park, Chongqing Road, Heping Community, Fuhai Street, Bao'an District, Shenzhen, Guangdong, China

# 3.2 Test Facility

The test facility is recognized, certified, or accredited by the following organizations:

# CNAS-Lab Code: L5488

Attestation of Global Compliance (Shenzhen) Co., Ltd. has been assessed and proved to follow CNAS-CL01 Accreditation Criteria for Testing and Calibration Laboratories (identical to ISO/IEC17025: 2017 General Requirements for the Competence of Testing and Calibration Laboratories.)

### A2LA-Lab Cert. No.: 5054.02

Attestation of Global Compliance (Shenzhen) Co., Ltd. EMC Laboratory has been accredited by A2LA for technical competence in the field of electrical testing, and proved to follow ISO/IEC 17025: 2017 General Requirements for the Competence of Testing and Calibration Laboratories and any additional program requirements in the identified field of testing.

#### FCC-Registration No.: 975832

Attestation of Global Compliance (Shenzhen) Co., Ltd. EMC Laboratory has been registered and fully described in a report filed with the FCC (Federal Communications Commission). The acceptance letter from the FCC is maintained in our files with Registration 975832.

#### IC-Registration No.: 24842(CAB identifier: CN0063)

Attestation of Global Compliance (Shenzhen) Co., Ltd. EMC Laboratory has been registered and fully described in a report filed with the Certification and Engineering Bureau of Industry Canada. The acceptance letter from the IC is maintained in our files with Registration 24842.



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#### 3.3 Environmental Conditions

	Normal Conditions	Extreme Conditions	
Temperature range (℃)	15 - 35	-20 - 50	
Relative humidity range	20 % - 75 %	20 % - 75 %	
Pressure range (kPa)	86 - 106	86 - 106	
Power supply	DC 5V	LV:DC4.5V/HV:DC5.5V	

Note: The Extreme Temperature and Extreme Voltages declared by the manufacturer.

# 3.4 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%.

Item	Measurement Uncertainty
Uncertainty of Conducted Emission for AC Port	$U_c = \pm 2.9 \text{ dB}$
Uncertainty of Radiated Emission below 150kHz	$U_c = \pm 3.9 \text{ dB}$
Uncertainty of Radiated Emission below 30MHz	$U_c = \pm 4.9 \text{ dB}$
Uncertainty of Radiated Emission below 1GHz	$U_c = \pm 4.0 \text{ dB}$
Uncertainty of total RF power, conducted	$U_c = \pm 0.8 \text{ dB}$
Uncertainty of RF power density, conducted	$U_c = \pm 2.6 \text{ dB}$
Uncertainty of spurious emissions, conducted	U <sub>c</sub> = ±2 %
Uncertainty of Occupied Channel Bandwidth	$U_c = \pm 2.7 \%$



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# 3.5 List of Equipment Used

RF Conducted Test System							
I I I I I I I I I I I I I I I I I I I							Next Cal. Date (YY-MM-DD)
$\boxtimes$	AGC-ER-E036	Spectrum Analyzer	Agilent	N9020A	MY49100060	2024-05-24	2025-05-23
$\boxtimes$	AGC-ER-E075	Small Environmental Tester	SH-242	ESPEC	93008290	2024-07-24	2026-07-23
$\boxtimes$	N/A	RF Connection Cable	N/A	2#	N/A	Each time	N/A

• F	Radiated Spurious Emission						
Used	Equipment No.	Test Equipment	Manufacturer	Model No.	Serial No.	Last Cal. Date (YY-MM-DD)	Next Cal. Date (YY-MM-DD)
$\boxtimes$	AGC-EM-E116	EMI Test Receiver	R&S	ESCI	100034	2024-05-24	2025-05-23
$\boxtimes$	AGC-EM-E086	Loop Antenna	ZHINAN	ZN30900C	18051	2024-03-05	2026-03-04
	AGC-EM-E001	Wideband Antenna	SCHWARZBECK	VULB9168	D69250	2023-05-11	2025-05-10
$\boxtimes$	AGC-EM-A138	6dB Attenuator	Eeatsheep	LM-XX-6-5W	N/A	2023-06-09	2025-06-08

<ul><li>A</li></ul>	AC Power Line Conducted Emission							
Used Equipment No. Test Equipment Manufacturer Model No. Serial No. Last Cal. Date (YY-MM-DD) (YY-MM-DD)								
$\boxtimes$	AGC-EM-E045	EMI Test Receiver	R&S	ESPI	101206	2024-05-28	2025-05-27	
	AGC-EM-E023	AMN	R&S	100086	ESH2-Z5	2024-05-28	2025-05-27	

• Tes	Test Software							
Used	Equipment No.	Test Equipment	Manufacturer	Model No.	Version Information			
$\boxtimes$	AGC-EM-S003	RE Test System	FARA	EZ-EMC	V.RA-03A			
	AGC-EM-S001	CE Test System	R&S	ES-K1	V1.71			



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# 4. System Test Configuration

# 4.1 EUT Configuration

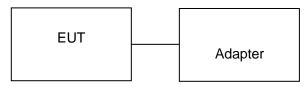
The EUT configuration for testing is installed on RF field strength measurement to meet the Commission's requirement and operating in a manner which intends to maximize its emission characteristics in a continuous normal application.

#### 4.2 EUT Exercise

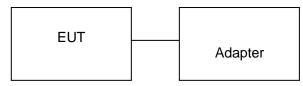
The Transmitter was operated in the normal operating mode. The TX frequency was fixed which was for the purpose of the measurements.

# 4.3 Configuration of Tested System

Radiated Emission Configure:



# Conducted Emission Configure:



# 4.4 Equipment Used in Tested System

The following peripheral devices and interface cables were connected during the measurement:

# ☐ Test Accessories Come From The Laboratory

No.	Equipment	Manufacturer	Model No.	Specification Information	Cable
1	Adapter	Huawei	HW-200440C00	Input(AC):100V-240V 50/60Hz 2.4A Output(DC):USB-C(5V/3A)	1.0m unshielded

# 

No.	Equipment	Manufacturer	Model No.	Specification Information	Cable
1	Battery 1#	GuangDong JinLu New Energy Co., Ltd.	JL-B201-1500mAh	DC 7.4V 1500mAh	
2	Battery 2#	GUANGDONG BERON ENERGY TECHNOLOGY CO., LTD.	BL-2S1P18650-7.4V 1500mAh	DC 7.4V 1500mAh	1



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# 4.5 Summary of Test Results

Item	FCC Rules	Description of Test	Result
1	§15.203	Antenna Equipment	Pass
2	15.225(a)(b)(c)	Field Strength of Fundamental	Pass
3	§15.209	Radiated Spurious Emissions	Pass
4	§15.215(c)	20dB Bandwidth	Pass
5	§15.205(a)	Restricted Bands of Operation	Pass
6	§15.225(e)	Frequency Stability	Pass
7	§15.207	AC Power Line Conducted Emission	Pass



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# 5. Description of Test Modes

Summary table of Test Cases					
Test Item	Equipment category / Modulation				
rest item	Near Field Communication / ASK				
Radiated & Conducted Test Cases	Mode1: NFC TX _13.56 MHz (Battery powered or Connect adapter+ Battery 1#) Mode 2: NFC TX _13.56 MHz (Battery powered or Connect adapter+ Battery 2#)				
AC Conducted Emission  Mode 1: NFC TX _13.56 MHz (Connect adapter+ Batter Mode 2: NFC TX _13.56 MHz (Connect adapter+ Batter)					

#### Note:

- 1. Only the result of the worst case was recorded in the report, if no other cases.
- 2. The battery is full-charged during the test.
- 3. For Radiated Emission, 3axis were chosen for testing for each applicable mode.
- 4. For Conducted Test method, a temporary antenna connector is provided by the manufacture.
- The prototype has two types of batteries (Battery 1#:JL-B201-1500mAh and Battery 2#: BL-2S1P18650-7.4V 1500mAh). In response to this difference, both prototypes were tested and recorded in the report.



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# 6. Field Strength of Fundamental

# 6.1 Provisions Applicable

Rules and specifications	FCC CFR 47 Part 15 section 15.225				
Description	Compliance v	vith the spectrum ma	sk is tested with RBV	V set to 9kHz.	
Freq. of Emission (MHz)	Field Strength (µV/m) at 30m	Field Strength (dBµV/m) at 30m	Field Strength (dBµV/m) at 10m	Field Strength (dBµV/m) at 3m	
1.705~13.110	30	29.5	48.58	69.5	
13.110~13.410	106	40.5	59.58	80.5	
13.410~13.553	334	50.5	69.58	90.5	
13.553~13.567	15848	84.0	103.08	124.0	
13.567~13.710	334	50.5	69.58	90.5	
13.710~14.010	106	40.5	59.58	80.5	
14.010~30.000	30	29.5	48.58	69.5	

#### **6.2 Measurement Procedure**

- 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.
- 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



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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.

The following table is the setting of spectrum analyzer and receiver.

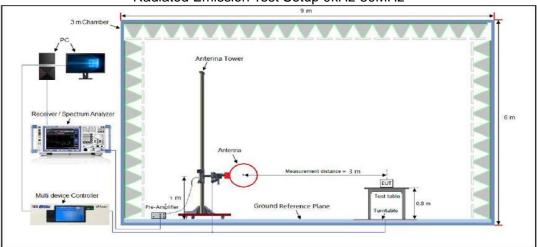
Spectrum Parameter	Setting	
Start ~Stop Frequency	9kHz~150kHz/RB 200Hz for QP	
Start ~Stop Frequency	150kHz~30MHz/RB 9kHz for QP	
Start ~Stop Frequency	30MHz~1000MHz/RB 120kHz for QP	
Start ~Stop Frequency	1GHz~26.5GHz	
Start *Stop i requeriey	1MHz/3MHz for Peak, 1MHz/3MHz for Average	

Receiver Parameter	Setting
Start ~Stop Frequency	9kHz~150kHz/RB 200Hz for QP
Start ~Stop Frequency	150kHz~30MHz/RB 9kHz for QP
Start ~Stop Frequency	30MHz~1000MHz/RB 120kHz for QP

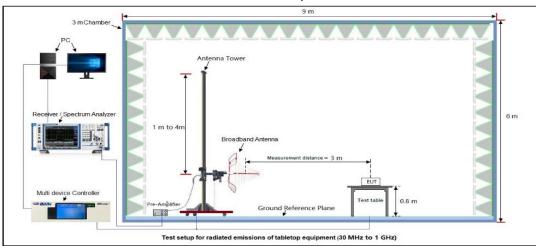


# 6.3 Measurement Setup (Block Diagram of Configuration)

Radiated Emission Test Setup 9kHz-30MHz



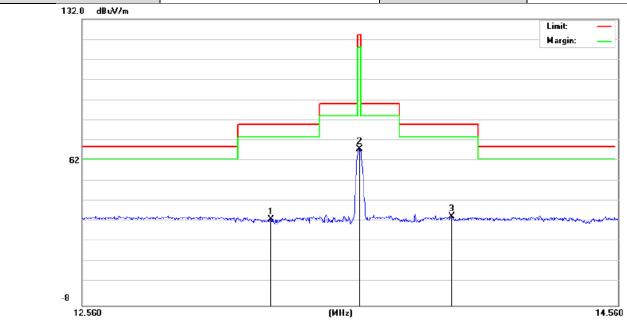
# Radiated Emission Test Setup 30MHz-1000MHz





#### 6.4 Measurement Result

EUT Name	Label Printer	Model Name	NIIMBOT B1
Temperature	23.2°C	Relative Humidity	56.6%
Pressure	960hPa	Test Voltage	DC 5V from adapter
Test Mode	Mode 1	Antenna Polarity	Face

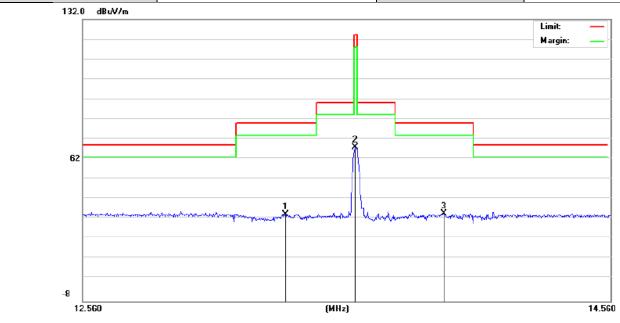


No. I	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector
1		13.2339	4.35	29.90	34.25	80.50	-46.25	peak
2		13.5600	38.70	29.91	68.61	124.0	-55.39	peak
3	*	13.9100	5.50	29.92	35.42	80.50	-45.08	peak

# **RESULT: Pass**



EUT Name	Label Printer	Model Name	NIIMBOT B1
Temperature	23.2°C	Relative Humidity	56.6%
Pressure	960hPa	Test Voltage	DC 5V from adapter
Test Mode	Mode 1	Antenna Polarity	Side



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	,
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector
1		13.2940	5.28	29.90	35.18	80.50	-45.32	peak
2		13.5580	38.58	29.91	68.49	124.0	-55.51	peak
3	*	13.8979	5.72	29.92	35.64	80.50	-44.86	peak



EUT Name			Label Pri	inter		Model N	ame	NIII	MBOT B1
<b>Temperature</b>	е		23.2°C			Relative	Humidity	56.	6%
Pressure			960hPa			Test Volt	age	DC	5V from adap
Test Mode			Mode 2			Antenna	Polarity	Fac	ce
132	2.0 dBuV	//m							imit: ————————————————————————————————————
62	2	and selection and	the state of the s	E. Sundant markey and bank and and	<u></u>	Marinageneral	3.000 May 1000 May 10	ing records, which has been de-	And the second s
-8	12.560	Mk.	Freq.	Reading Level	(MHz) Correct Factor	Measure- ment	Limit	Over	14.560
-8	12.560 No.		MHz	Level dBuV	Correct Factor	ment dBuV/m	dBuV/m	dB	Detector
-8	12.560	Mk.		Level	Correct Factor	ment			

3

13.9840

4.84

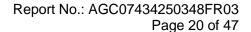
29.92

34.76

80.50

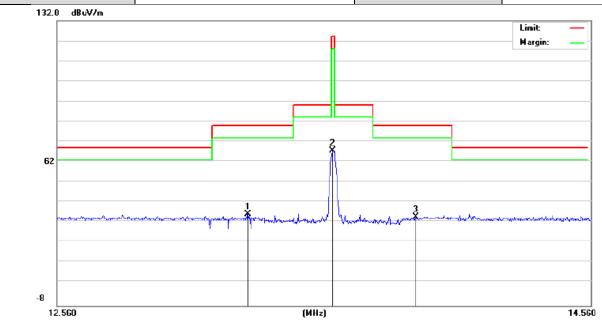
-45.74

peak





EUT Name	Label Printer	Model Name	NIIMBOT B1
Temperature	23.2°C	Relative Humidity	56.6%
Pressure	960hPa	Test Voltage	DC 5V from adapter
Test Mode	Mode 2	Antenna Polarity	Side



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector
1	*	13.2440	7.16	29.90	37.06	80.50	-43.44	peak
2		13.5580	38.25	29.91	68.16	124.0	-55.84	peak
3		13.8740	5.64	29.92	35.56	80.50	-44.94	peak

- 1. Factor=Antenna Factor + Cable loss, Margin=Measurement-Limit.
- 2. The "Factor" value can be calculated automatically by software of measurement system.



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# 7. Radiated Spurious Emissions

# 7.1 Provisions Applicable

According to 15.35, on any frequency or frequencies below or equal to 1000 MHz, the limits Shown are based on measuring equipment employing a CISPR quasi-peak detector function and related measurement bandwidths, unless otherwise specified the limit on peak radio frequency emissions is 20dB above the maximum permitted average emission limit applicable to the equipment under test.

The field strength of any emissions which appear outside of 13.110 ~14.010MHz band shall not exceed the general radiated emissions limits.

15.209 Limit in the below table has to be followed:

Frequency	Distance	Field Strengths Limit		
(MHz)	Meters	μV/m	dB(μV)/m	
0.009 ~ 0.490	300	2400/F(kHz)		
0.490 ~ 1.705	30	24000/F(kHz)		
1.705 ~ 30	30	30		
30 ~ 88	3	100	40.0	
88 ~ 216	3	150	43.5	
216 ~ 960	3	200	46.0	
960 ~ 1000	3	500	54.0	
Above 1000	Above 1000 3 74.0 dB 54.0 dB(µ			

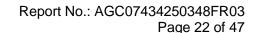
#### Remark:

- (1) Emission level dB $\mu$ V = 20 log Emission level  $\mu$ V/m
- (2) The smaller limit shall apply at the cross point between two frequency bands.
- (3) Distance is the distance in meters between the measuring instrument, antenna and the closest point of any part of the device or system.

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

#### 7.2 Measurement Procedure

- 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.
- 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.

The following table is the setting of spectrum analyzer and receiver.

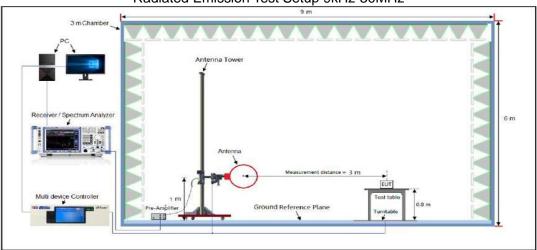
Spectrum Parameter	Setting				
Start ~Stop Frequency	9kHz~150kHz/RB 200Hz for QP				
Start ~Stop Frequency	150kHz~30MHz/RB 9kHz for QP				
Start ~Stop Frequency	30MHz~1000MHz/RB 120kHz for QP				
Start ~Stop Frequency	1GHz~26.5GHz				
Start ~Stop i requency	1MHz/3MHz for Peak, 1MHz/3MHz for Average				

Receiver Parameter	Setting
Start ~Stop Frequency	9kHz~150kHz/RB 200Hz for QP
Start ~Stop Frequency	150kHz~30MHz/RB 9kHz for QP
Start ~Stop Frequency	30MHz~1000MHz/RB 120kHz for QP

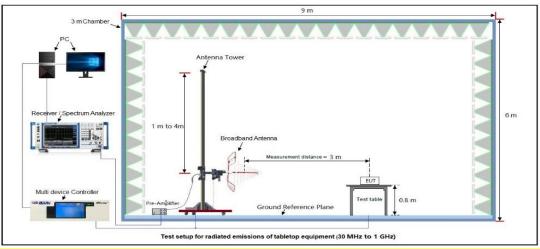


# 7.3 Measurement Setup (Block Diagram of Configuration)

Radiated Emission Test Setup 9kHz-30MHz



# Radiated Emission Test Setup 30MHz-1000MHz





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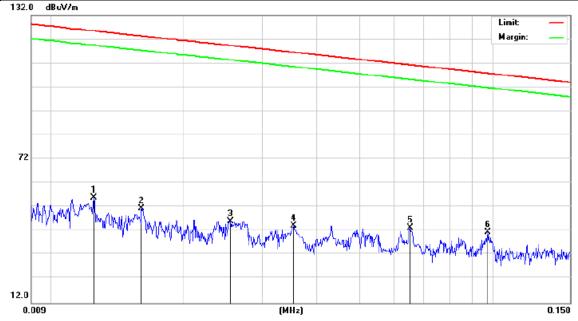
#### 7.4 Measurement Result

# Radiated Emission From 9kHz to 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.

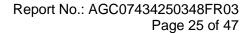
#### Radiated Emission From 9kHz-150kHz

EUT Name	Label Printer	Model Name	NIIMBOT B1
Temperature	22.4°C	Relative Humidity	58.5%
Pressure	960hPa	Test Voltage	DC 5V from adapter
Test Mode	Mode 1	Antenna Polarity	Horizontal



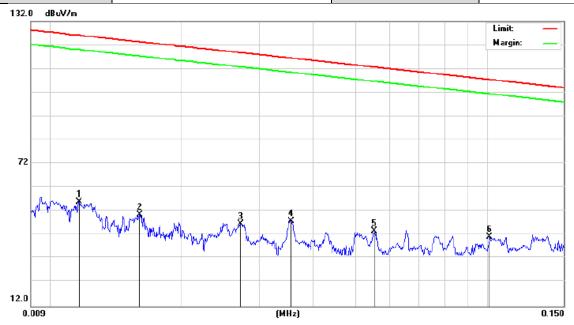
No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector
1		0.0125	13.76	42.20	55.96	125.44	-69.48	peak
2		0.0160	11.34	40.23	51.57	123.34	-71.77	peak
3		0.0253	9.33	36.74	46.07	119.38	-73.31	peak
4		0.0354	9.22	34.96	44.18	116.48	-72.30	peak
5		0.0650	10.33	32.87	43.20	111.24	-68.04	peak
6	*	0.0974	9.39	32.16	41.55	107.57	-66.02	peak

# **RESULT: PASS**

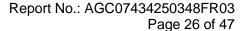




EUT Name	Label Printer	Model Name	NIIMBOT B1
Temperature	22.4°C	Relative Humidity	58.5%
Pressure	960hPa	Test Voltage	DC 5V from adapter
Test Mode	Mode 1	Antenna Polarity	Vertical



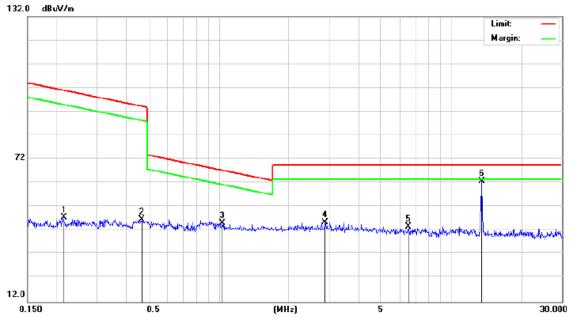
No. Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
	MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector
1	0.0115	13.10	42.76	55.86	126.19	-70.33	peak
2	0.0160	10.35	40.23	50.58	123.34	-72.76	peak
3	0.0273	10.47	36.28	46.75	118.73	-71.98	peak
4	0.0355	12.90	34.95	47.85	116.46	-68.61	peak
5	0.0551	10.20	33.31	43.51	112.66	-69.15	peak
6 *	0.1015	8.98	32.14	41.12	107.93	-66.81	peak





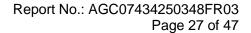
The Magnetic Field From 150kHz-30MHz

EUT	Label Printer	Model Name	NIIMBOT B1	
Temperature	22.4°C	Relative Humidity	58.5%	
Pressure	960hPa	Test Voltage	DC 5V from adapter	
Test Mode	Mode 1	Antenna	Face	



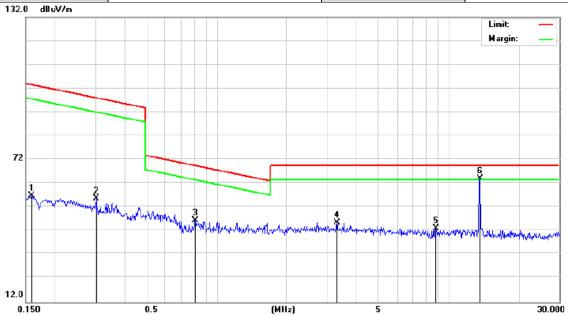
Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector
0.2151	14.91	32.62	47.53	100.91	-53.38	peak
0.4661	14.27	32.24	46.51	94.23	-47.72	peak
1.0320	13.20	31.98	45.18	67.33	-22.15	peak
2.8692	14.14	31.27	45.41	69.54	-24.13	peak
6.5572	15.17	28.37	43.54	69.54	-26.00	peak
13.5600	32.92	29.91	62.83	69.54	-6.71	peak
	MHz 0.2151 0.4661 1.0320 2.8692 6.5572	Freq. Level  MHz dBuV  0.2151 14.91  0.4661 14.27  1.0320 13.20  2.8692 14.14  6.5572 15.17	Freq.         Level         Factor           MHz         dBuV         dB           0.2151         14.91         32.62           0.4661         14.27         32.24           1.0320         13.20         31.98           2.8692         14.14         31.27           6.5572         15.17         28.37	Freq.         Level         Factor         ment           MHz         dBuV         dB         dBuV/m           0.2151         14.91         32.62         47.53           0.4661         14.27         32.24         46.51           1.0320         13.20         31.98         45.18           2.8692         14.14         31.27         45.41           6.5572         15.17         28.37         43.54	Freq.         Level         Factor         ment         Limit           MHz         dBuV         dB         dBuV/m         dBuV/m           0.2151         14.91         32.62         47.53         100.91           0.4661         14.27         32.24         46.51         94.23           1.0320         13.20         31.98         45.18         67.33           2.8692         14.14         31.27         45.41         69.54           6.5572         15.17         28.37         43.54         69.54	Freq.         Level         Factor         ment         Limit         Over           MHz         dBuV         dB         dBuV/m         dBuV/m         dB           0.2151         14.91         32.62         47.53         100.91         -53.38           0.4661         14.27         32.24         46.51         94.23         -47.72           1.0320         13.20         31.98         45.18         67.33         -22.15           2.8692         14.14         31.27         45.41         69.54         -24.13           6.5572         15.17         28.37         43.54         69.54         -26.00

**RESULT: PASS** 





EUT	Label Printer	Model Name	NIIMBOT B1
Temperature	22.4°C	Relative Humidity	58.5%
Pressure	960hPa	Test Voltage	DC 5V from adapter
Test Mode	Mode 1	Antenna	Side



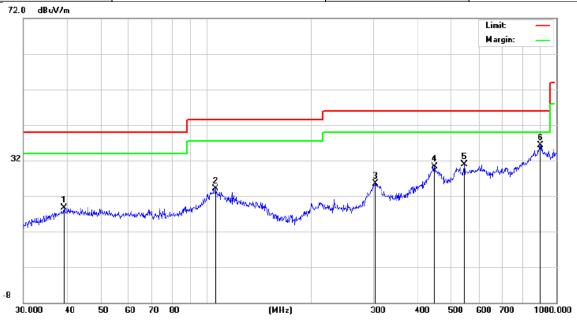
No. Mk	. Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	,
	MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector
1	0.1590	24.37	32.44	56.81	103.51	-46.70	peak
2	0.3019	23.34	32.41	55.75	97.98	-42.23	peak
3	0.8087	14.17	32.14	46.31	69.45	-23.14	peak
4	3.2930	14.57	31.00	45.57	69.54	-23.97	peak
5	8.8223	13.77	29.18	42.95	69.54	-26.59	peak
6 *	13.5600	34.18	29.91	64.09	69.54	-5.45	peak

# **RESULT: PASS**



# Radiated Emission From 30MHz ~1000MHz

EUT	Label Printer	Model Name	NIIMBOT B1
Temperature	22.4°C	Relative Humidity	58.5%
Pressure	960hPa	Test Voltage	DC 5V from adapter
Test Mode	Mode 1	Antenna	Horizontal

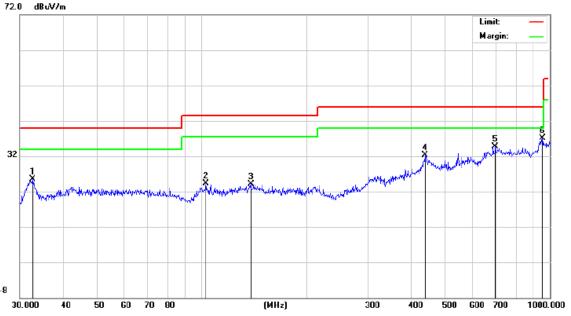


No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector
1		39.1616	5.17	13.54	18.71	40.00	-21.29	peak
2	,	106.3850	7.92	16.26	24.18	43.50	-19.32	peak
3		303.5437	8.91	16.50	25.41	46.00	-20.59	peak
4	4	147.9822	5.50	24.82	30.32	46.00	-15.68	peak
5	į	545.1826	6.88	23.98	30.86	46.00	-15.14	peak
6	* (	900.1474	4.55	31.78	36.33	46.00	-9.67	peak

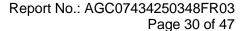
**RESULT: PASS** 



EUT	Label Printer	Model Name	NIIMBOT B1			
Temperature	22.4°C	Relative Humidity	58.5%			
Pressure	960hPa	Test Voltage	DC 5V from adapter			
Test Mode	Mode 1	Antenna	Vertical			
72.0 dBuV/m						



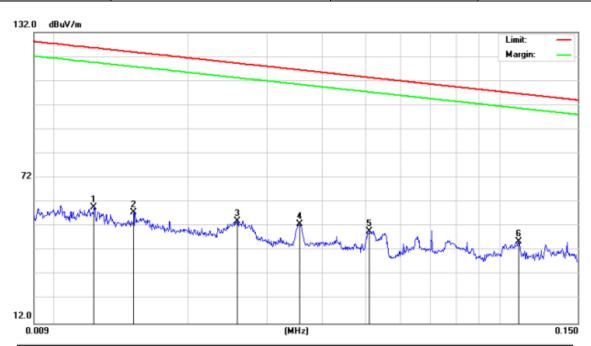
No.	Mk.	. Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	,
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector
1		32.6340	11.12	14.47	25.59	40.00	-14.41	peak
2		102.7192	9.66	14.68	24.34	43.50	-19.16	peak
3		138.3873	5.92	18.16	24.08	43.50	-19.42	peak
4		437.1199	6.63	25.64	32.27	46.00	-13.73	peak
5		696.8567	6.60	28.04	34.64	46.00	-11.36	peak
6	*	952.0937	6.64	30.52	37.16	46.00	-8.84	peak





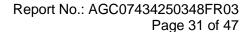
# Radiated Emission From 9kHz-150kHz

EUT Name	Label Printer	Model Name	NIIMBOT B1
Temperature	22.4°C	Relative Humidity	58.5%
Pressure	960hPa	Test Voltage	DC 5V from adapter
Test Mode	Mode 2	Antenna Polarity	Horizontal



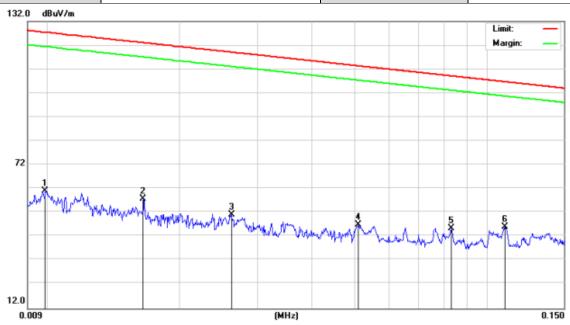
No. Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
	MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector
1	0.0123	17.44	42.31	59.75	125.61	-65.86	peak
2	0.0151	17.16	40.74	57.90	123.84	-65.94	peak
3	0.0258	17.57	36.63	54.20	119.21	-65.01	peak
4	0.0355	17.86	34.95	52.81	116.46	-63.65	peak
5	0.0509	16.52	33.52	50.04	113.35	-63.31	peak
6 *	0.1103	13.47	32.18	45.65	106.67	-61.02	peak

**RESULT: PASS** 

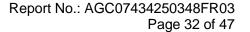




EUT Name	Label Printer	Model Name	NIIMBOT B1
Temperature	22.4°C	Relative Humidity	58.5%
Pressure	960hPa	Test Voltage	DC 5V from adapter
Test Mode	Mode 2	Antenna Polarity	Vertical



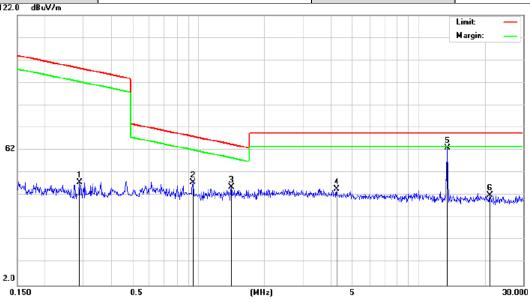
No. Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
	MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector
1	0.0099	17.46	43.66	61.12	127.48	-66.36	peak
2	0.0165	17.71	39.95	57.66	123.07	-65.41	peak
3	0.0262	14.59	36.53	51.12	119.08	-67.96	peak
4	0.0509	13.46	33.52	46.98	113.35	-66.37	peak
5	0.0830	12.94	32.38	45.32	109.13	-63.81	peak
6 *	0.1101	13.79	32.18	45.97	106.69	-60.72	peak





The Magnetic Field From 150kHz-30MHz

EUT	Label Printer	Model Name	NIIMBOT B1
Temperature	22.4°C	Relative Humidity	58.5%
Pressure	960hPa	Test Voltage	DC 5V from adapter
Test Mode	Mode 2	Antenna	Face

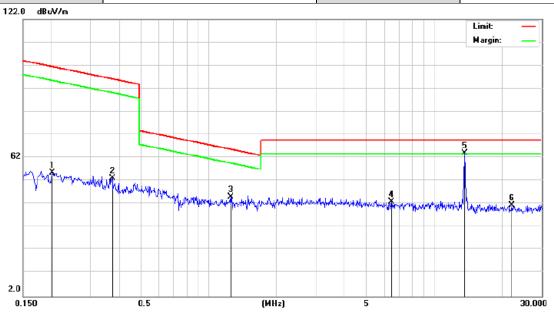


No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector
1		0.2878	15.39	32.44	47.83	98.39	-50.56	peak
2		0.9431	15.68	32.06	47.74	68.11	-20.37	peak
3		1.4107	13.91	31.80	45.71	64.62	-18.91	peak
4		4.2465	14.67	30.19	44.86	69.54	-24.68	peak
5	*	13.5600	33.23	29.91	63.14	69.54	-6.40	peak
6		21.1471	12.04	29.96	42.00	69.54	-27.54	peak

**RESULT: PASS** 



EUT	Label Printer	Model Name	NIIMBOT B1
Temperature	22.4°C	Relative Humidity	58.5%
Pressure	960hPa	Test Voltage	DC 5V from adapter
Test Mode	Mode 2	Antenna	Side



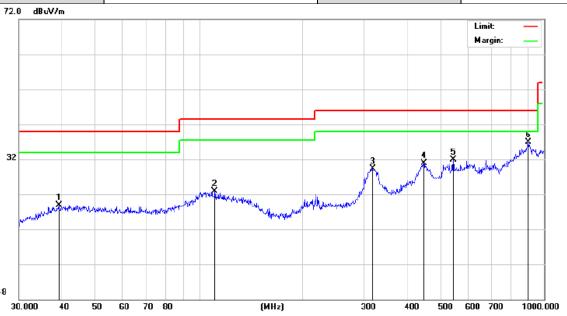
No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector
1		0.2028	22.81	32.65	55.46	101.41	-45.95	peak
2		0.3731	20.68	32.34	53.02	96.15	-43.13	peak
3		1.2555	13.24	31.88	45.12	65.63	-20.51	peak
4		6.4537	14.60	28.41	43.01	69.54	-26.53	peak
5	*	13.5600	33.97	29.91	63.88	69.54	-5.66	peak
6		22.0627	11.57	29.91	41.48	69.54	-28.06	peak

# **RESULT: PASS**



# Radiated Emission From 30MHz ~1000MHz

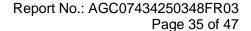
EUT	Label Printer	Model Name	NIIMBOT B1
Temperature	22.4°C	Relative Humidity	58.5%
Pressure	960hPa	Test Voltage	DC 5V from adapter
Test Mode	Mode 2	Antenna	Horizontal



No.	Mk	. Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector
1		39.1616	5.33	13.54	18.87	40.00	-21.13	peak
2		110.9571	6.66	16.31	22.97	43.50	-20.53	peak
3		318.8170	12.80	16.50	29.30	46.00	-16.70	peak
4		447.9822	6.10	24.82	30.92	46.00	-15.08	peak
5		545.1826	7.94	23.98	31.92	46.00	-14.08	peak
6	*	900.1474	5.08	31.78	36.86	46.00	-9.14	peak

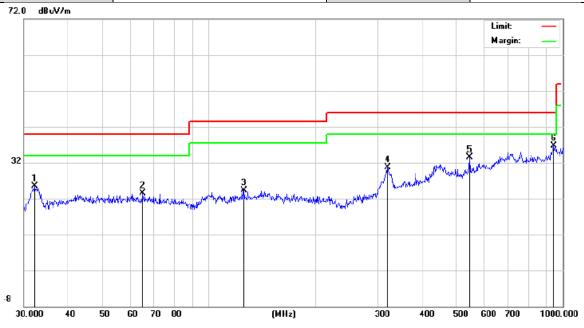
**RESULT: PASS** 

c





EUT	Label Printer	Model Name	NIIMBOT B1
Temperature	22.4°C	Relative Humidity	58.5%
Pressure	960hPa	Test Voltage	DC 5V from adapter
Test Mode	Mode 2	Antenna	Vertical



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector
1		32.1795	11.26	14.32	25.58	40.00	-14.42	peak
2		65.1145	6.37	17.05	23.42	40.00	-16.58	peak
3		125.8864	6.40	17.85	24.25	43.50	-19.25	peak
4		319.9370	10.33	20.30	30.63	46.00	-15.37	peak
5		545.1826	8.79	24.67	33.46	46.00	-12.54	peak
6	*	942.1305	5.84	30.91	36.75	46.00	-9.25	peak

- 1. Factor=Antenna Factor + Cable loss, Margin=Measurement-Limit.
- 2. The "Factor" value can be calculated automatically by software of measurement system.



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#### 8. 20dB Bandwidth Measurement

#### 8.1 Provisions Applicable

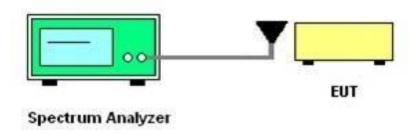
Intentional radiators must be designed to ensure that the 20dB and 99% emission bandwidth in the specific band 13.553~13.567MHz.

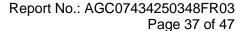
#### **8.2 Measurement Procedure**

Set the parameters of SPA as below:

- The spectrum analyzer connected via a receive antenna placed near the EUT in peak Max hold mode.
- 2. Centre frequency = Operation Frequency
- 3. The resolution bandwidth of 10 kHz and the video bandwidth of 30 kHz were used.
- 4. Span: 100kHz, Sweep time: Auto
- Set the EUT to continue transmitting mode. Allow the trace to stabilize. Use the "N dB down" function of SPA to define the bandwidth.
- 6. Measured the spectrum width with power higher than 20dB below carrier.
- 7. Measured the 99% OBW.
- 8. Record the plots and reported.

# 8.3 Measurement Setup (Block Diagram of Configuration)







#### 8.4 Measurement Result

		Test Data of Bandwidth	Measurement		
Test Channel (MHz)	Modulation	99% Occupied Bandwidth (kHz)	-20dB Bandwidth (kHz)	Limits (kHz)	Pass or Fail
13.56	ASK	22.886	26.8	N/A	Pass

# Test Graphs of Occupied Bandwidth and -20dB Bandwidth





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# 9. Frequency Stability Measurement

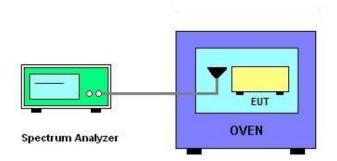
#### 9.1 Provisions Applicable

The frequency tolerance of the carrier signal shall be maintained within +/- 0.01% (100ppm) of the operating frequency over a temperature variation of -20 degrees to +50 degrees C at normal supply voltage, and for a variation in the primary supply voltage from 85% to 115% of the rated supply voltage at a temperature of 20 degrees C. For battery operated equipment, the equipment tests shall be performed using a new battery.

# 9.2 Measurement Procedure

- 1. The spectrum analyzer connected via a receive antenna placed near the EUT.
- 2. EUT have transmitted signal and fixed channelize.
- 3. Set the spectrum analyzer span to view the entire emissions bandwidth.
- 4. Set RBW = 1 kHz, VBW = 3 kHz with peak detector and max hold settings.
- 5. The fc is declaring of channel frequency. Then the frequency error formula is  $(fc-f)/fc \times 106$  ppm and the limit is less than  $\pm 100$ ppm.
- 6. Extreme temperature rule is -20°C~50°C.

#### 9.3 Measurement Setup (Block Diagram of Configuration)

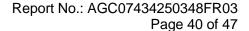




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# 9.4 Measurement Result

	Tes	t Data of Frequ	ency Stability Measurement		
Test Channel (MHz)	Measurement Voltage	Temperature	Measurement Result (ppm)	Limits (ppm)	Pass or Fail
	(V)	(°C)	50		D
		-20	52	±100	Pass
		-10	39	±100	Pass
		0	51	±100	Pass
	5.00	10	50	±100	Pass
	3.00	25	53	±100	Pass
13.56		30	55	±100	Pass
		40	54	±100	Pass
		50	48	±100	Pass
	5.00	25	48	±100	Pass
	4.50	25	56	±100	Pass
	5.50	25	53	±100	Pass





# 10. AC Power Line Conducted Emission Test

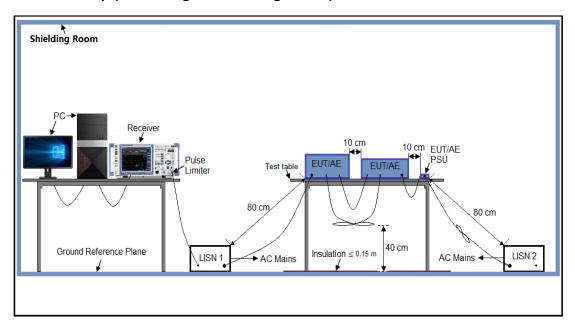
#### 10.1 Measurement Limit

Fraguenay Dange	Maximum RF	Line Voltage
Frequency Range	Q.P. (dBµV)	Average (dBµV)
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.

# 10.2 Measurement Setup (Block Diagram of Configuration)





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# 10.3 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 5V 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.

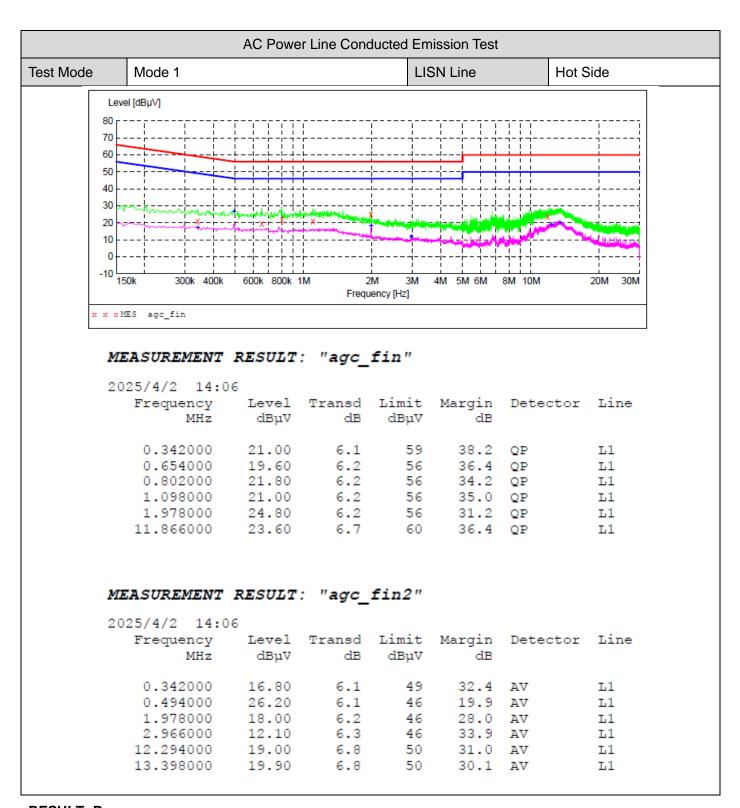
Then, the EUT configuration and cable configuration of the above highest emission level were recorded for reference of final testing.

#### 10.4 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.
- 4. A conducted emission is calculated by the following equation:
  - Measurement Level (dBμV) = Receiver reading (dBμV) + Transd (dB)
  - Transd (dB)= AMN Factor(dB)+Cable Loss(dB)+Attenuation(dB)
  - Margin= Limit-Level

#### 10.5 Measurement Result







		AC Power	Line Cond	ducted Em	ission Test		
Test Mode	Mode 1			LIS	SN Line	Neu	tral Side
Le	evel [dBµV]						
80							
70							
60		<u> </u>				1 1 1	
40	· · · · · · · · · · · · · · · · · · ·						
30	~~~\ 	; 		ļ			
20	X X X X X X X X X X X X X X X X X X X	1-1	Water Water Company	-	and the same	- X	Mariah mari
10			A Secondary	<u> </u>			National Property
0-		 		-			
-10	150k 300k 400k	600k 800k 1N		2M 3M	4M 5M 6M	8M 10M	20M 30M
			Frequ	uency [Hz]			
ж ж ж	MES agc_fin						
10	EXCUDEMENT !	DECITE.	"	£in"			
FI	EASUREMENT I	KESULI.	"agc_	IIn.			
20	025/4/2 14:03	}					
						Detector	Line
	MHz	dΒμV	dB	dΒμV	dB		
	0.290000	21.80	6.1	61	38.7	QP	N
	0.794000	26.20	6.2	56	29.8	QP	N
	1.206000	21.50	6.2	56	34.5		N
	1.306000	21.30	6.2	56	34.7		N
	1.974000	23.30	6.2	56	32.7		N
	13.382000	24.40	6.8	60	35.6	QP	N
M	EASUREMENT I	RESULT:	"agc_	fin2"			
20	025/4/2 14:03	}					
	Frequency					Detector	Line
	MHz	dBµ∇	dB	dΒμV	dB		
	0.362000	17.20	6.1	49	31.5	AV	N
	0.794000	20.00	6.2	46	26.0	AV	N
	1.978000	18.60	6.2	46	27.4		N
	4.446000	14.30	6.3	46			N
		18.70 19.50	6.8	50 50	31.3		N
	13.714000	19.50	6.8	50	30.5	AV	N



				1			
t Mode	Mode 2			LIS	SN Line	Hot	Side
L	Level [dBµV]						
80	)						
70	) <del></del>						
60	)	<u>-                                    </u>	<u> </u>		<u>ii</u>	+++	<del>- i</del>
50	) <del></del>				<del></del>	111	+
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20		- X	X	X			
10			· · · · · · · · · · · · · · · · · · ·				-
-10	1 1 1					7-17	
"	150k 300k 400k	600k 800k 1		M 3M ency [Hz]	4M 5M 6M	8M 10M	20M 30M
_			riequi	ency [nz]			
хх	x MES agc_fin						
1	<i>MEASUREMENT</i>	RESILT	: "agc	f i 22 "			
		KESULI					
			. agc_				
	2025/4/2 11:1	12	_		Margin	Detector	Line
	2025/4/2 11:1		_	Limit dBµV	Margin dB	Detector	. Line
	2025/4/2 11:1 Frequency MHz	Level dBµV	Transd dB	Limit dBµV	dB	Detector	. Line
	2025/4/2 11:1 Frequency MHz 0.334000	Level dBµV	Transd dB	Limit dBµV 59	dB 38.5	QP	L1
	2025/4/2 11:1 Frequency MHz 0.334000 0.534000	Level dBµV 20.90 19.60	Transd dB	Limit dBµV 59 56	dB 38.5 36.4	QP QP	L1 L1
	2025/4/2 11:1 Frequency MHz 0.334000 0.534000 1.026000	Level dBµV 20.90 19.60 20.50	Transd dB 6.1 6.2 6.2	Limit dBµV 59 56 56	dB 38.5 36.4 35.5	QP QP QP	L1 L1 L1
	2025/4/2 11:1 Frequency MHz 0.334000 0.534000 1.026000 2.126000	Level dBµV 20.90 19.60 20.50 15.30	Transd dB 6.1 6.2 6.2 6.2	Limit dBµV 59 56 56 56	38.5 36.4 35.5 40.7	QP QP QP QP	L1 L1 L1 L1
	2025/4/2 11:1 Frequency MHz 0.334000 0.534000 1.026000 2.126000 3.610000	Level dBµV 20.90 19.60 20.50 15.30 10.80	Transd dB 6.1 6.2 6.2 6.2 6.3	Limit dBµV 59 56 56 56 56	38.5 36.4 35.5 40.7 45.2	QP QP QP QP QP	L1 L1 L1 L1
	2025/4/2 11:1 Frequency MHz 0.334000 0.534000 1.026000 2.126000 3.610000	Level dBµV 20.90 19.60 20.50 15.30	Transd dB 6.1 6.2 6.2 6.2	Limit dBµV 59 56 56 56	38.5 36.4 35.5 40.7	QP QP QP QP	L1 L1 L1 L1
	2025/4/2 11:1 Frequency MHz 0.334000 0.534000 1.026000 2.126000 3.610000	Level dBµV 20.90 19.60 20.50 15.30 10.80	Transd dB 6.1 6.2 6.2 6.2 6.3	Limit dBµV 59 56 56 56 56	38.5 36.4 35.5 40.7 45.2	QP QP QP QP QP	L1 L1 L1 L1
	2025/4/2 11:1 Frequency MHz 0.334000 0.534000 1.026000 2.126000 3.610000 12.162000	Level dBµV 20.90 19.60 20.50 15.30 10.80 16.30	Transd dB 6.1 6.2 6.2 6.2 6.3 6.8	Limit dBµV 59 56 56 56 56	38.5 36.4 35.5 40.7 45.2	QP QP QP QP QP	L1 L1 L1 L1
	2025/4/2 11:1 Frequency MHz 0.334000 0.534000 1.026000 2.126000 3.610000	Level dBµV 20.90 19.60 20.50 15.30 10.80 16.30	Transd dB 6.1 6.2 6.2 6.2 6.3 6.8	Limit dBµV 59 56 56 56 56	38.5 36.4 35.5 40.7 45.2	QP QP QP QP QP	L1 L1 L1 L1
1	2025/4/2 11:1 Frequency MHz  0.334000 0.534000 1.026000 2.126000 3.610000 12.162000	Level dBµV 20.90 19.60 20.50 15.30 10.80 16.30	Transd dB 6.1 6.2 6.2 6.2 6.3 6.8	Limit dBµV 59 56 56 56 60	38.5 36.4 35.5 40.7 45.2 43.7	QP QP QP QP QP QP	L1 L1 L1 L1 L1
1	2025/4/2 11:1 Frequency MHz  0.334000 0.534000 1.026000 2.126000 3.610000 12.162000  MEASUREMENT  2025/4/2 11:1 Frequency	Level dBµV 20.90 19.60 20.50 15.30 10.80 16.30	Transd dB 6.1 6.2 6.2 6.2 6.3 6.8	Limit dBµV 59 56 56 56 60  fin2" Limit	38.5 36.4 35.5 40.7 45.2 43.7	QP QP QP QP QP QP	L1 L1 L1 L1 L1
1	2025/4/2 11:1 Frequency MHz  0.334000 0.534000 1.026000 2.126000 3.610000 12.162000	Level dBµV 20.90 19.60 20.50 15.30 10.80 16.30	Transd dB 6.1 6.2 6.2 6.2 6.3 6.8	Limit dBµV 59 56 56 56 60	38.5 36.4 35.5 40.7 45.2 43.7	QP QP QP QP QP QP	L1 L1 L1 L1 L1
1	2025/4/2 11:1 Frequency MHz  0.334000 0.534000 1.026000 2.126000 3.610000 12.162000  MEASUREMENT  2025/4/2 11:1 Frequency MHz	Level dBµV 20.90 19.60 20.50 15.30 10.80 16.30 RESULT	Transd dB 6.1 6.2 6.2 6.2 6.3 6.8 : "agc_	Limit dBµV 59 56 56 56 56 60 <b>fin2"</b> Limit dBµV	38.5 36.4 35.5 40.7 45.2 43.7 Margin dB	QP QP QP QP QP QP	L1 L1 L1 L1 L1
1	2025/4/2 11:1 Frequency MHz  0.334000 0.534000 1.026000 2.126000 3.610000 12.162000  MEASUREMENT  2025/4/2 11:1 Frequency MHz  0.358000	Level dBµV 20.90 19.60 20.50 15.30 10.80 16.30 RESULT 12 Level dBµV 16.70	Transd dB 6.1 6.2 6.2 6.2 6.3 6.8  : "agc_  Transd dB 6.1	Limit dBµV 59 56 56 56 56 60 <b>fin2"</b> Limit dBµV	38.5 36.4 35.5 40.7 45.2 43.7 Margin dB	QP QP QP QP QP QP	L1 L1 L1 L1 L1 L1
1	2025/4/2 11:1 Frequency MHz  0.334000 0.534000 1.026000 2.126000 3.610000 12.162000  MEASUREMENT  2025/4/2 11:1 Frequency MHz  0.358000 0.494000	Level dBµV 20.90 19.60 20.50 15.30 10.80 16.30 RESULT 12 Level dBµV 16.70 22.40	Transd dB 6.1 6.2 6.2 6.2 6.3 6.8  : "agc_  Transd dB 6.1 6.1 6.1	Limit dBµV 59 56 56 56 56 60 <b>fin2"</b> Limit dBµV 49 46	38.5 36.4 35.5 40.7 45.2 43.7 Margin dB 32.1 23.7	QP QP QP QP QP QP AV	L1 L1 L1 L1 L1 L1
1	2025/4/2 11:1 Frequency MHz  0.334000 0.534000 1.026000 2.126000 3.610000 12.162000  MEASUREMENT  2025/4/2 11:1 Frequency MHz  0.358000 0.494000 1.218000	Level dBµV 20.90 19.60 20.50 15.30 10.80 16.30 RESULT 12 Level dBµV 16.70	Transd dB 6.1 6.2 6.2 6.2 6.3 6.8  : "agc_  Transd dB 6.1 6.1 6.2	Limit dBµV 59 56 56 56 56 60 <b>fin2"</b> Limit dBµV 49 46 46	38.5 36.4 35.5 40.7 45.2 43.7 Margin dB 32.1 23.7 30.2	QP QP QP QP QP QP AV AV	L1 L1 L1 L1 L1 L1
1	2025/4/2 11:1 Frequency MHz  0.334000 0.534000 1.026000 2.126000 3.610000 12.162000  MEASUREMENT  2025/4/2 11:1 Frequency MHz  0.358000 0.494000 1.218000	Level dBµV 20.90 19.60 20.50 15.30 10.80 16.30 RESULT 12 Level dBµV 16.70 22.40 15.80 10.80	Transd dB 6.1 6.2 6.2 6.2 6.3 6.8  : "agc_  Transd dB 6.1 6.1 6.2 6.2 6.2	Limit dBµV 59 56 56 56 56 60 <b>fin2"</b> Limit dBµV 49 46	38.5 36.4 35.5 40.7 45.2 43.7 Margin dB 32.1 23.7 30.2 35.2	QP QP QP QP QP QP AV AV AV	L1 L1 L1 L1 L1 L1 L1



	T		r Line Cond			1	
Mode	Mode 2			LIS	SN Line	Neut	ral Side
Le	vel [dBµV]			•			
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70			·				
60					<u></u>	+++	
50						111	!
40				 			
30	water water	Maria de la companio	. Landard			4-+4	
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-10	150k 300k 400k	600k 800k 1	IM 2	M 3M	4M 5M 6M	8M 10M	20M 30M
			Frequ	ency [Hz]			
xxx	MES agc_fin						
_				<b>.</b>			
M	EASUREMENT	RESULT	: "agc_	Iln"			
2	025/4/2 11:1	8					
2	025/4/2 11:1 Frequency		Transd	Limit	Margin	Detector	Line
2	025/4/2 11:1 Frequency MHz	Level	Transd dB		Margin dB	Detector	Line
2	Frequency		Transd dB	Limit dBµV	_	Detector	Line
2	Frequency	Level			_	Detector	Line N
2	Frequency MHz	Level dBµV 21.00 26.30	dB 6.1 6.1	dBµ∇	dB		
2	Frequency MHz 0.346000 0.494000 1.290000	Level dBµV 21.00 26.30 21.20	dB 6.1 6.2	dBµV 59 56 56	dB 38.1	QP QP	N
2	Frequency MHz 0.346000 0.494000 1.290000 2.666000	Level dBµV 21.00 26.30 21.20 14.70	dB 6.1 6.2 6.3	dВµV 59 56	dB 38.1 29.8 34.8 41.3	QP QP QP QP	N N
2	0.346000 0.494000 1.290000 2.666000	Level dBµV 21.00 26.30 21.20 14.70 17.10	dB 6.1 6.2 6.3 6.8	dBµV 59 56 56	38.1 29.8 34.8 41.3 42.9	QP QP QP QP	N N N
2	0.346000 0.494000 1.290000 2.666000	Level dBµV 21.00 26.30 21.20 14.70	dB 6.1 6.2 6.3	dBμV 59 56 56 56	dB 38.1 29.8 34.8 41.3	QP QP QP QP	N N N
2	0.346000 0.494000 1.290000 2.666000	Level dBµV 21.00 26.30 21.20 14.70 17.10	dB 6.1 6.2 6.3 6.8	dBμV 59 56 56 56 60	38.1 29.8 34.8 41.3 42.9	QP QP QP QP QP	N N N N
2	0.346000 0.494000 1.290000 2.666000	Level dBµV 21.00 26.30 21.20 14.70 17.10	dB 6.1 6.2 6.3 6.8	dBμV 59 56 56 56 60	38.1 29.8 34.8 41.3 42.9	QP QP QP QP QP	N N N N
	Frequency MHz 0.346000 0.494000 1.290000 2.666000 12.130000 13.490000	Level dBµV 21.00 26.30 21.20 14.70 17.10 18.40	dB 6.1 6.2 6.3 6.8 6.8	dBµV 59 56 56 56 60 60	38.1 29.8 34.8 41.3 42.9	QP QP QP QP QP	N N N N
	0.346000 0.494000 1.290000 2.666000	Level dBµV 21.00 26.30 21.20 14.70 17.10 18.40	dB 6.1 6.2 6.3 6.8 6.8	dBµV 59 56 56 56 60 60	38.1 29.8 34.8 41.3 42.9	QP QP QP QP QP	N N N N
М	Frequency MHz 0.346000 0.494000 1.290000 2.666000 12.130000 13.490000	Level dBµV 21.00 26.30 21.20 14.70 17.10 18.40	dB 6.1 6.2 6.3 6.8 6.8	dBµV 59 56 56 56 60 60	38.1 29.8 34.8 41.3 42.9	QP QP QP QP QP	N N N N
М	Frequency MHz 0.346000 0.494000 1.290000 2.666000 12.130000 13.490000	Level dBµV 21.00 26.30 21.20 14.70 17.10 18.40 RESULT	dB 6.1 6.2 6.3 6.8 6.8 7 ransd	dBµV 59 56 56 60 60 fin2" Limit	dB 38.1 29.8 34.8 41.3 42.9 41.6	QP QP QP QP QP	N N N N N
М	Frequency MHz 0.346000 0.494000 1.290000 2.666000 12.130000 13.490000	Level dBµV 21.00 26.30 21.20 14.70 17.10 18.40 RESULT	dB 6.1 6.2 6.3 6.8 6.8 7 ransd	dBμV 59 56 56 56 60 60	dB 38.1 29.8 34.8 41.3 42.9 41.6	QP QP QP QP QP	N N N N N
М	Frequency MHz 0.346000 0.494000 1.290000 2.666000 12.130000 13.490000 EASUREMENT 025/4/2 11:1 Frequency MHz	Level dBµV 21.00 26.30 21.20 14.70 17.10 18.40 RESULT	dB 6.1 6.2 6.3 6.8 6.8 : "agc_ Transd dB	dBµV 59 56 56 60 60 fin2" Limit dBµV	38.1 29.8 34.8 41.3 42.9 41.6 Margin dB	QP QP QP QP QP QP	N N N N N
М	Frequency MHz 0.346000 0.494000 1.290000 2.666000 12.130000 13.490000 EASUREMENT 025/4/2 11:1 Frequency MHz 0.346000	Level dBµV 21.00 26.30 21.20 14.70 17.10 18.40 RESULT 8 Level dBµV 16.80	dB 6.1 6.2 6.3 6.8 6.8 7ransd dB 6.1	dBµV 59 56 56 60 60 fin2" Limit dBµV 49	dB 38.1 29.8 34.8 41.3 42.9 41.6  Margin dB	QP QP QP QP QP QP	N N N N N
М	Frequency MHz 0.346000 0.494000 1.290000 2.666000 12.130000 13.490000 EASUREMENT 025/4/2 11:1 Frequency MHz 0.346000 0.490000	Level dBµV 21.00 26.30 21.20 14.70 17.10 18.40 RESULT .8 Level dBµV 16.80 22.10	dB 6.1 6.2 6.3 6.8 6.8 7 ransd dB 6.1 6.1	dBµV 59 56 56 60 60  fin2" Limit dBµV 49 46	38.1 29.8 34.8 41.3 42.9 41.6 Margin dB 32.3 24.1	QP QP QP QP QP QP QP	N N N N N N
М	Frequency MHz 0.346000 0.494000 1.290000 2.666000 12.130000 13.490000 MEASUREMENT 025/4/2 11:1 Frequency MHz 0.346000 0.490000 1.102000	Level dBµV 21.00 26.30 21.20 14.70 17.10 18.40 RESULT 8 Level dBµV 16.80 22.10 16.10	dB 6.1 6.2 6.3 6.8 6.8 7 ransd dB 6.1 6.1 6.2	dBµV 59 56 56 56 60 60  fin2" Limit dBµV 49 46 46	dB  38.1 29.8 34.8 41.3 42.9 41.6  Margin dB  32.3 24.1 29.9	QP QP QP QP QP QP AV AV	N N N N N N
М	Frequency MHz 0.346000 0.494000 1.290000 2.666000 12.130000 13.490000 MEASUREMENT 025/4/2 11:1 Frequency MHz 0.346000 0.490000 1.102000 2.458000	Level dBµV 21.00 26.30 21.20 14.70 17.10 18.40 RESULT 8 Level dBµV 16.80 22.10 16.10 11.40	dB 6.1 6.2 6.3 6.8 6.8 7 ransd dB 6.1 6.1 6.2 6.3	dBµV 59 56 56 60 60  fin2" Limit dBµV 49 46 46 46 46	Margin dB 32.3 24.1 29.9 34.6	QP QP QP QP QP QP AV AV AV	N N N N N N N
М	Frequency MHz 0.346000 0.494000 1.290000 2.666000 12.130000 13.490000 MEASUREMENT 025/4/2 11:1 Frequency MHz 0.346000 0.490000 1.102000	Level dBµV 21.00 26.30 21.20 14.70 17.10 18.40 RESULT 8 Level dBµV 16.80 22.10 16.10 11.40 11.60	dB 6.1 6.2 6.3 6.8 6.8 7 ransd dB 6.1 6.1 6.2	dBµV 59 56 56 56 60 60  fin2" Limit dBµV 49 46 46	Margin dB  32.3 24.1 29.9 34.6 38.4	QP QP QP QP QP QP AV AV AV AV	N N N N N N

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Web: http://www.agccert.com/



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# Appendix I: Photographs of Test Setup

Refer to the Report No.: AGC07434250348AP03

**Appendix II: Photographs of Test EUT** 

Refer to the Report No.: AGC07434250348AP04



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# Conditions of Issuance of Test Reports

- 1. All samples and goods are accepted by the Attestation of Global Compliance (Shenzhen) Co., Ltd (the "Company") solely for testing and reporting in accordance with the following terms and conditions. The company provides its services on the basis that such terms and conditions constitute express agreement between the company and any person, firm or company requesting its services (the "Clients").
- 2. Any report issued by Company as a result of this application for testing services (the "Report") shall be issued in confidence to the Clients and the Report will be strictly treated as such by the Company. It may not be reproduced either in its entirety or in part and it may not be used for advertising or other unauthorized purposes without the written consent of the Company. The Clients to whom the Report is issued may, however, show or send it, or a certified copy thereof prepared by the Company to its customer, supplier or other persons directly concerned. The Company will not, without the consent of the Clients, enter into any discussion or correspondence with any third party concerning the contents of the Report, unless required by the relevant governmental authorities, laws or court orders. 3. The Company shall not be called or be liable to be called to give evidence or testimony on the Report in a court of law without its prior written consent, unless required by the relevant governmental authorities, laws or court orders.
- 4. In the event of the improper use of the report as determined by the Company, the Company reserves the right to withdraw it, and to adopt any other additional remedies which may be appropriate.
- 5. Samples submitted for testing are accepted on the understanding that the Report issued cannot form the basis of, or be the instrument for, any legal action against the Company.
- 6. The Company will not be liable for or accept responsibility for any loss or damage however arising from the use of information contained in any of its Reports or in any communication whatsoever about its said tests or investigations. 7. Clients wishing to use the Report in court proceedings or arbitration shall inform the Company to that effect prior to submitting the sample for testing.
- 8. The Company is not responsible for recalling the electronic version of the original report when any revision is made to them. The Client assumes the responsibility to providing the revised version to any interested party who uses them.
- 9. Subject to the variable length of retention time for test data and report stored hereinto as otherwise specifically required by individual accreditation authorities, the Company will only keep the supporting test data and information of the test report for a period of six years. The data and information will be disposed of after the aforementioned retention period has elapsed. Under no circumstances shall we provide any data and information which has been disposed of after retention period. Under no circumstances shall we be liable for damage of any kind, including (but not limited to) compensatory damages, lost profits, lost data, or any form of special, incidental, indirect, consequential or punitive damages of any kind, whether based on breach of contract of warranty, tort (including negligence), product liability or otherwise, even if we are informed in advance of the possibility of such damages.

----End of Report----