



FCC Part 96.47 TEST REPORT

FCC ID : UZ7MC345A
Equipment : Mobile Computer
Brand Name : ZEBRA
Model Name : MC345A
Applicant : Zebra Technologies Corporation
3 Overlook Point, Lincolnshire, IL 60069 USA
Manufacturer : Zebra Technologies Corporation
3 Overlook Point, Lincolnshire, IL 60069 USA
Standard : FCC Part 96.47
RF Interface : NR n48/n78

The product was received on Oct. 25, 2024, and testing was performed from Nov. 19, 2024 to Nov. 21, 2024. We, Sporton International Inc. Wensan Laboratory, would like to declare that the tested sample has been evaluated in accordance with the test procedures and has been in compliance with the applicable technical standards.

The test results in this report apply exclusively to the tested model / sample. Without written approval of Sporton International Inc. Wensan Laboratory, the test report shall not be reproduced except in full.

Approved by: Jones Tsai

Sportun International Inc. Wensan Laboratory

No.58, Aly. 75, Ln. 564, Wenhua 3rd, Rd., Guishan Dist., Taoyuan City 333010, Taiwan (R.O.C)



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History of this test report



Summary of Test Result

Report Clause	Ref Std. Clause	Test Items	Result (PASS/FAIL)	Remark
3	96.47	End User Device additional requirement	Pass	-

Conformity Assessment Condition:

The test results (PASS/FAIL) with all measurement uncertainty excluded are presented against the regulation limits or in accordance with the requirements stipulated by the applicant/manufacturer who shall bear all the risks of non-compliance that may potentially occur if measurement uncertainty is taken into account.

Disclaimer:

The product specifications of the EUT presented in the test report that may affect the test assessments are declared by the manufacturer who shall take full responsibility for the authenticity.

Reviewed by: Keven Cheng

Report Producer: Mila Chen



1 General Description

1.1 Product Feature of Equipment Under Test

Product Feature	
Equipment	Mobile Computer
Brand Name	ZEBRA
Model Name	MC345A
FCC ID	UZ7MC345A
Sample 1	SKU 9 (Brick+SE5800+38 Keypad)
Sample 2	SKU 10 (Gun+SE4770+29 Keypad)
Sample 3	SKU 11 (Gun+SE5500+47 Keypad)
EUT supports Radios application	WCDMA/HSPA/LTE/5G NR/NFC WLAN 11a/b/g/n HT20/HT40 WLAN 11ac VHT20/VHT40/VHT80/VHT160 WLAN 11ax HE20/HE40/HE80/HE160 Bluetooth BR/EDR/LE
HW Version	EV
SW Version	14-10-10.00-UG-U00-PRD-NEM-04
MFD	14SEP24
EUT Stage	Identical Prototype

Remark:

1. The EUT's information above is declared by manufacturer. Please refer to Disclaimer in report summary.
2. All the tests performed with Sample 1 and Battery 1 Standard Battery (7000mAh).



Stage	MC34 WWAN SKU list				
Configuration	SKU3	SKU6	SKU9	SKU10	SKU11
WW/WL	WWAN	WWAN	WWAN	WWAN	WWAN
Form Factor	FA	FA	FA	FA	FA
SKU	Prem	Prem+	Prem+	Prem	Prem+
Brick / Gun	Gun	Gun	Brick	Gun	Gun
DDR size	6GB	6GB	6GB	6GB	6GB
UFS size	64GB	128GB	128GB	64GB	128GB
Scan engine	SE5500	SE5800	SE5800	SE4770	SE5500
FF Camera	None	5MP (PN)	5MP (PN)	None	5MP (PN)
RF Camera		13MP (PN)	13MP (PN)		13MP (PN)
Keypad	47	47	38	29	47
Battery	7000mAh	7000mAh	7000mAh	7000mAh	7000mAh
Region (ROW or NA)	NA	NA	NA	NA	NA

Specification of Accessories					
Adapter USB Wall Charger	Brand Name	Zebra	Model Number	PWR-WUA5V12W0US	
Battery 1 Standard Battery (7000mAh)	Brand Name	Zebra	Model Number	BT-000375	
			Manufacturer	TWS	
Battery 2 Standard Battery (7000mAh)	Brand Name	Zebra	Model Number	BT-000375	
			Manufacturer	Inventus	
Battery 3 BLE Battery (7000mAh)	Brand Name	Zebra	Model Number	BT-000444	
Battery 4 BLE Battery (7000mAh)	Brand Name	Zebra	Model Number	BT-000375	
			Manufacturer	TWS	
Type C USB Cable	Brand Name	Zebra	Model Number	CBL-TC5X-USBC2A-01	
USB Cable Cup	Brand Name	Zebra	Model Number	CBL-MC33-USBCHG-01	
Soft Holster for Gun Type	Brand Name	Zebra	Model Number	SG-MC3021212-01R	
Soft Holster for Brick Type	Brand Name	Zebra	Model Number	SG-MC3X-SHLSTB-01	
USB-C PTT Headset	Brand Name	Zebra	Model Number	HDST-USBC-PTT1-01	
USB-C to 3.5mm adapter	Brand Name	Zebra	Model Number	ADP-USBC-35MM1-01	
3.5mm To Quick Disconnect (QD) Adapter Cable	Brand Name	Zebra	Model Number	ADP-35M-QDCBL1-01	
3.5mm PTT Headset	Brand Name	Zebra	Model Number	HDST-35MM-PTT1-01	
3.5mm PTT HS2100 Headset	Brand Name	Zebra	Model Number	HS2100	
Quick Disconnect (QD) Cable	Brand Name	Zebra	Model Number	CBL-HS2100-QDC1-01	



1.2 Modification of EUT

No modifications are made to the EUT during the entire test sessions.

1.3 Testing Laboratory

Test Site	Sportun International Inc. Wensan Laboratory
Test Site Location	No.58, Aly. 75, Ln. 564, Wenhua 3rd, Rd., Guishan Dist., Taoyuan City 333010, Taiwan (R.O.C.) TEL: +886-3-327-0868 FAX: +886-3-327-0855
Test Site No.	Sportun Site No.
	TH05-HY
Test Engineer	Alston
Temperature	21 ~ 22 °C
Relative Humidity	45 ~ 52 %

FCC designation No.: TW3786

1.4 Applicable Standards

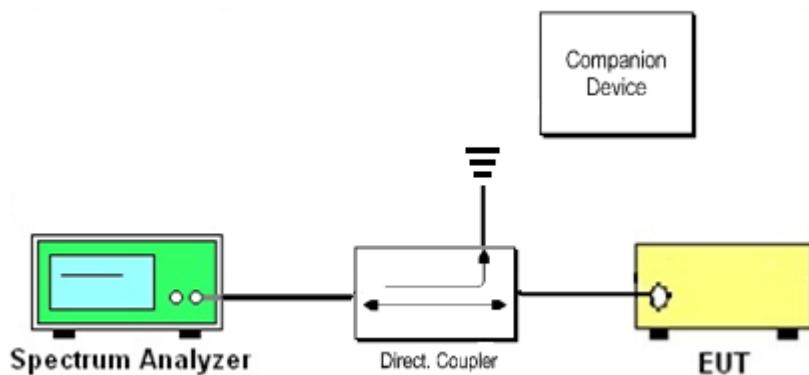
- ♦ FCC Part 96.47
- ♦ FCC KDB 940660 D01 Part 96 CBRS Eqpt v03
- ♦ WINNF-TS-0122-V1.0.2 CBRS CBSD Test Specification

Remark:

1. All test items were verified and recorded according to the standards and without any deviation during the test.
2. The TAF code is not including all the FCC KDB listed without accreditation.

2 Test Configuration of Equipment Under Test

2.1 Connection Diagram of Test System



The companion device is a certified NR CBSD (FCC ID: PIDAS2900)



3 End User Device additional requirement

3.1 Test Requirement

FCC Part 96.47

(a) End User Devices may operate only if they can positively receive and decode an authorization signal transmitted by a CBSD, including the frequencies and power limits for their operation.

(1) An End User Device must discontinue operations, change frequencies, or change its operational power level within 10 seconds of receiving instructions from its associated CBSD.



3.2 Test Procedure

The following procedure is following in accordance with WINNF-TS-0122-V1.0.2 CBRS CBSD Test Specification, using the certified Airspan NR CBSD (FCC ID: PIDAS2900) as companion device to present compliance with Part 96.47 requirement for End User Device (EUD):

<For n48>

1. Configure SAS granted CBSD to operate at frequency 3560-3600 MHz and power level 10 dBm/MHz
2. Enable CBSD service from Airspan ACP management
3. Check EUD Tx Frequency and power
4. Disable CBSD service from Airspan ACP management
 - a. Check if EUD stops transmission within 10 seconds.
5. Configure SAS granted CBSD to operate at frequency 3650-3690 MHz and power level 20 dBm/MHz
6. Enable CBSD service from Airspan ACP management
7. Check EUD Tx Frequency and power
8. Disable CBSD service from Airspan ACP management
 - a. Check if EUD stops transmission within 10 seconds.

<For n78>

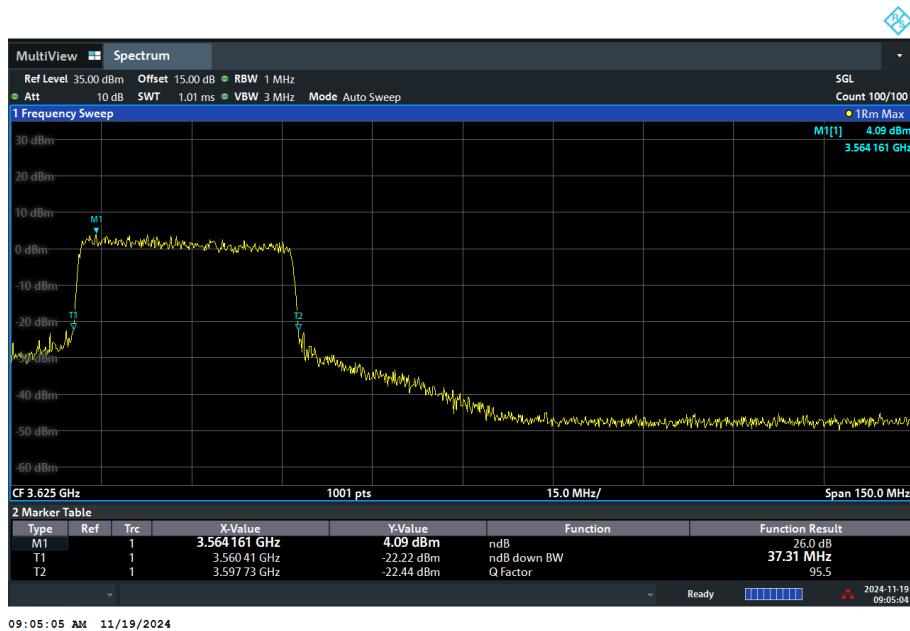
1. Configure SAS granted CBSD to operate at frequency 3550-3650 MHz and power level 10 dBm/MHz
2. Enable CBSD service from Airspan ACP management
3. Check EUD Tx Frequency and power
4. Disable CBSD service from Airspan ACP management
 - a. Check if EUD stops transmission within 10 seconds.
5. Configure SAS granted CBSD to operate at frequency 3600-3700 MHz and power level 20 dBm/MHz
6. Enable CBSD service from Airspan ACP management
7. Check EUD Tx Frequency and power
8. Disable CBSD service from Airspan ACP management
 - a. Check if EUD stops transmission within 10 seconds.

3.3 Test Result

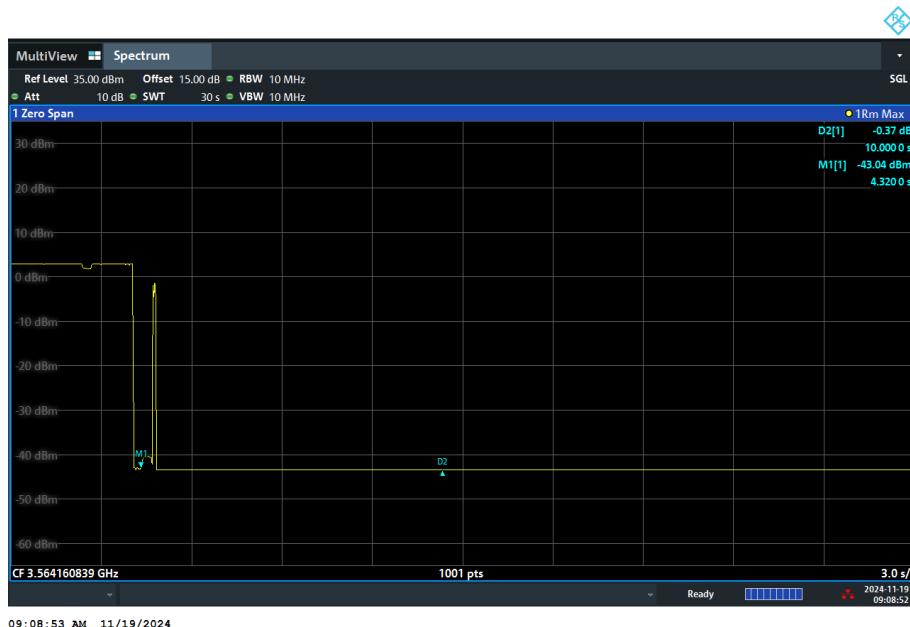
<For n48>

[Step 1] Configure SAS granted CBSD to operate at frequency 3560-3600 MHz and power level 10 dBm/MHz

[Step 3] Check EUD Tx Frequency and power



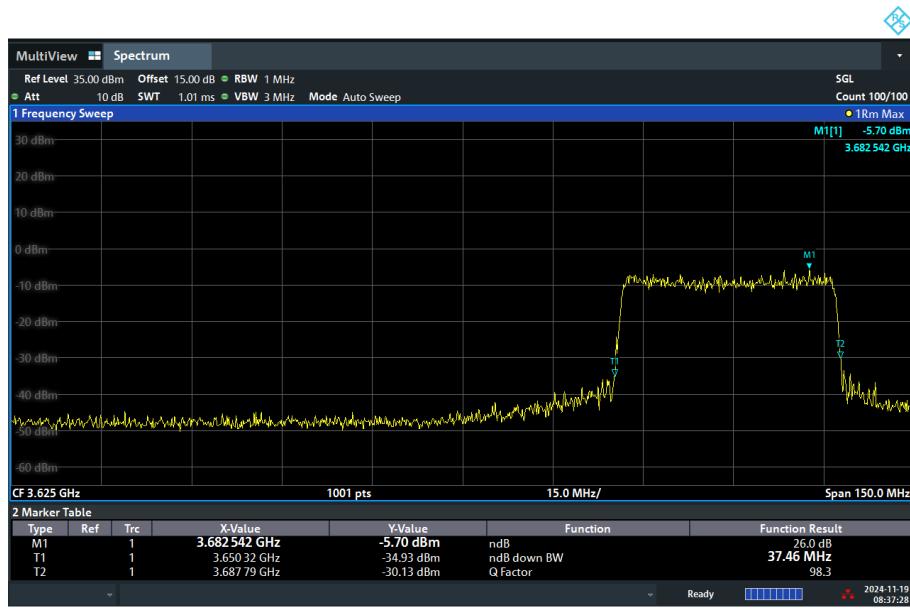
[Step 4.a.] EUD stops transmission within 10 seconds right after receiving instructions from its associated CBSD.





[Step 5] Configure SAS granted CBSD to operate at frequency 3650-3690 MHz & power level 20 dBm/MHz

[Step 7] Check EUD Tx Frequency and power



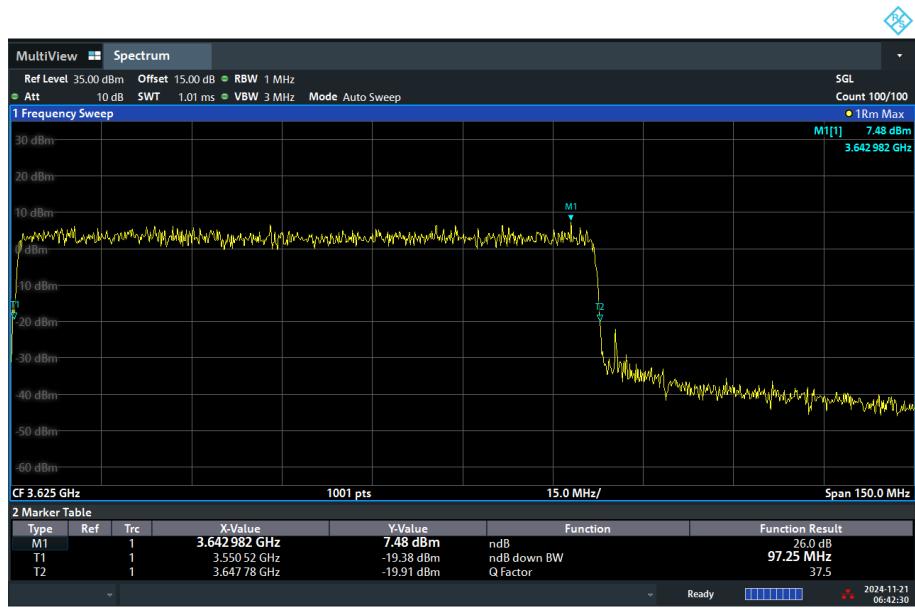
[Step 8.a.] After changing the frequency and power level, The EUD discontinues operating, changes frequencies, or changes its operational power level within 10 seconds right after receiving instructions from its associated CBSD. Test result is a PASS.



<For n78>

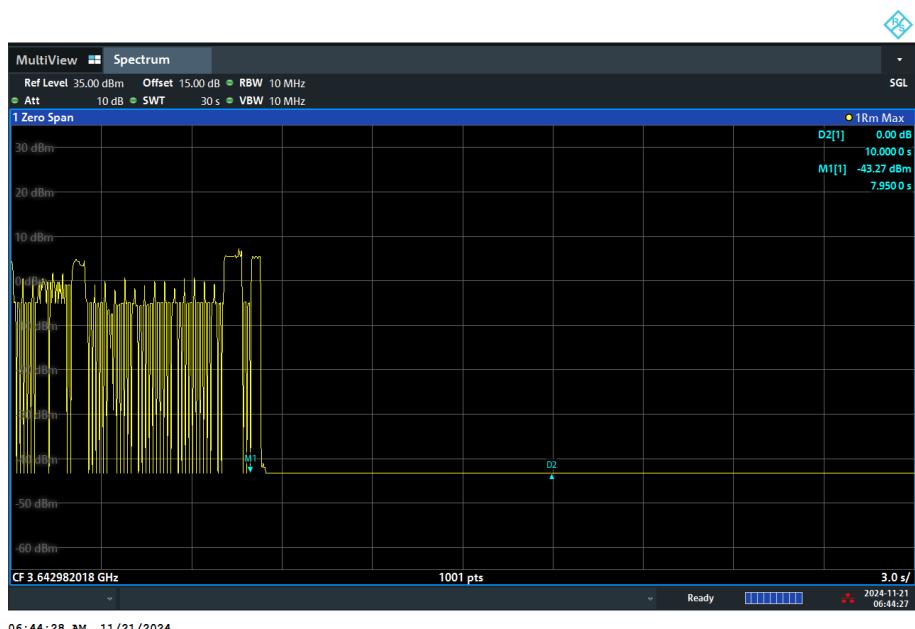
[Step 1] Configure SAS granted CBSD to operate at frequency 3550-3650 MHz and power level 10 dBm/MHz

[Step 3] Check EUD Tx Frequency and power



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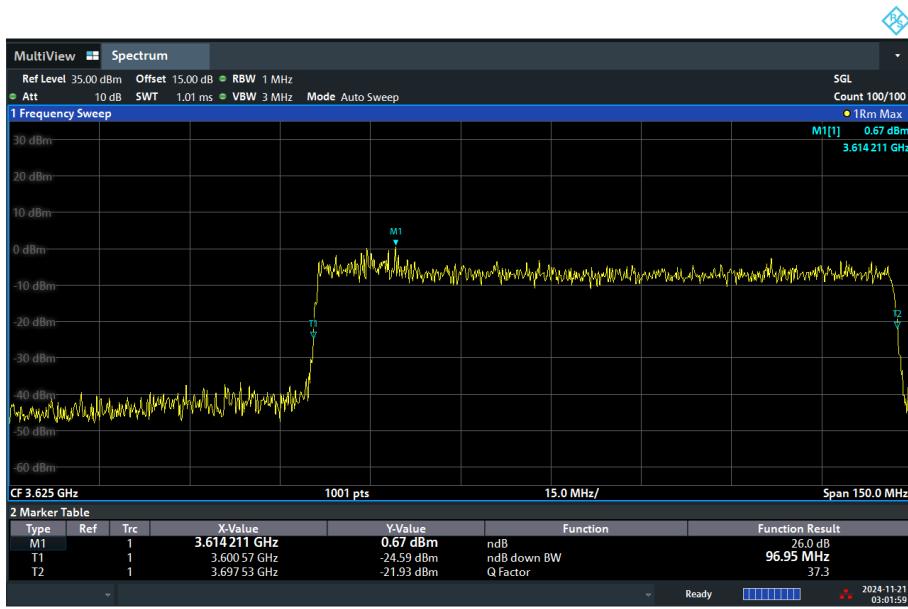
[Step 4.a.] EUD stops transmission within 10 seconds right after receiving instructions from its associated CBSD.



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[Step 5] Configure SAS granted CBSD to operate at frequency 3600-3700 MHz & power level 20 dBm/MHz

[Step 7] Check EUD Tx Frequency and power



[Step 8.a.] After changing the frequency and power level,

The EUD discontinues operating, changes frequencies, or changes its operational power level within 10 seconds right after receiving instructions from its associated CBSD. Test result is a PASS.





4 Measuring Equipment List

Instrument	Brand Name	Model No.	Serial No.	Characteristics	Calibration Date	Test Date	Due Date	Remark
Spectrum Analyzer	R&S	FSV3044	101467	10Hz~44GHz	Jan. 18, 2024	Nov. 19, 2024~Nov. 21, 2024	Jan. 17, 2025	Conducted (TH05-HY)