



# FCC RADIO TEST REPORT

**FCC ID** : UZ7RFD8500  
**Equipment** : RFD8500 UHF RFID READER  
**Brand Name** : ZEBRA  
**Model Name** : RFD8500  
**Applicant** : Zebra Technologies Corporation  
1 Zebra Plaza, Holtsville, NY 11742  
**Manufacturer** : Zebra Technologies Corporation  
1 Zebra Plaza, Holtsville, NY 11742  
**Standard** : FCC Part 15 Subpart C §15.247

The product was received on Jul. 07, 2022 and testing was started from Jul. 14, 2022 to Jul. 25, 2022. We, Sporton International Inc. EMC & Wireless Communications 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. EMC & Wireless Communications Laboratory, the test report shall not be reproduced except in full.

Approved by: Louis Wu

**Sporton International Inc. EMC & Wireless Communications Laboratory**  
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## History of this test report

Version	Description	Issued Date
01	Initial issue of report	Sep. 02, 2022



## 1. Verification Data Section

Summary of the worst result:

Test Item	Mode	Old Chipset Worst Result	New Chipset Worst Result	Difference (dB)
Conducted Power (dBm)	RFID channel _902.75MHz	29.92	29.85	-0.07
	RFID channel _914.75MHz	29.83	29.77	-0.06
	RFID channel _927.25MHz	29.89	29.85	-0.04
Radiated Spurious Emission (dBuV/m)	RFID channel _902.75MHz	59.70	43.62	-16.08
	RFID channel _914.75MHz	58.60	45.09	-14.51
	RFID channel _927.25MHz	57.10	47.92	-9.18

**Remark:**

1. Conducted power test and radiated spurious emission test was performed in this test report.  
The verify emission level is not degraded more than 3dB, and the margin to the limit is greater than 1.5dB.  
Due to the verify results which is complied with Notification 202109-001 item #5 requirement.
2. The setup photographs please refer to Sporton report number FR252407C as below.



## 2. List of Measuring Equipment

Instrument	Brand Name	Model No.	Serial No.	Characteristics	Calibration Date	Test Date	Due Date	Remark
Bilog Antenna	TESEQ	CBL 6111D & 00800N1D01N-06	35419 & 03	30MHz~1GHz	Apr. 24, 2022	Jul. 15, 2022~ Jul. 16, 2022	Apr. 23, 2023	Radiation (03CH07-HY)
Double Ridge Horn Antenna	ESCO	3117	00075962	1GHz ~ 18GHz	Dec. 03, 2021	Jul. 15, 2022~ Jul. 16, 2022	Dec. 02, 2022	Radiation (03CH07-HY)
Loop Antenna	Rohde & Schwarz	HFH2-Z2	100315	9 kHz~30 MHz	Jan. 07, 2022	Jul. 15, 2022~ Jul. 16, 2022	Jan. 06, 2023	Radiation (03CH07-HY)
Preamplifier	MITEQ	AMF-7D-0010 1800-30-10P	1590075	1GHz~18GHz	Apr. 21, 2022	Jul. 15, 2022~ Jul. 16, 2022	Apr. 20, 2023	Radiation (03CH07-HY)
Preamplifier	COM-POWER	PA-103A	161241	10MHz~1GHz	Oct. 04, 2021	Jul. 15, 2022~ Jul. 16, 2022	Oct. 03, 2022	Radiation (03CH07-HY)
Spectrum Analyzer	Agilent	N9030A	MY52350276	3Hz~44GHz	Jul. 22, 2021	Jul. 15, 2022~ Jul. 16, 2022	Jul. 21, 2022	Radiation (03CH07-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 104	MY15682/4	30MHz to 18GHz	Feb. 23, 2022	Jul. 15, 2022~ Jul. 16, 2022	Feb. 22, 2023	Radiation (03CH07-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 104	MY24971/4	9kHz to 18GHz	Feb. 23, 2022	Jul. 15, 2022~ Jul. 16, 2022	Feb. 22, 2023	Radiation (03CH07-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 104	MY28655/4	9kHz to 18GHz	Feb. 23, 2022	Jul. 15, 2022~ Jul. 16, 2022	Feb. 22, 2023	Radiation (03CH07-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 126	532078/126E	30MHz~18GHz	Sep. 17, 2021	Jul. 15, 2022~ Jul. 16, 2022	Sep. 16, 2022	Radiation (03CH07-HY)
Controller	EMEC	EM1000	N/A	Control Ant Mast	N/A	Jul. 15, 2022~ Jul. 16, 2022	N/A	Radiation (03CH07-HY)
Controller	MF	MF-7802	N/A	Control Turn table	N/A	Jul. 15, 2022~ Jul. 16, 2022	N/A	Radiation (03CH07-HY)
Antenna Mast	EMEC	AM-BS-4500E	N/A	Boresight mast 1M~4M	N/A	Jul. 15, 2022~ Jul. 16, 2022	N/A	Radiation (03CH07-HY)
Turn Table	ChainTek	Chaintek 3000	N/A	0~360 Degree	N/A	Jul. 15, 2022~ Jul. 16, 2022	N/A	Radiation (03CH07-HY)
Software	Audix	E3 6.2009-8-24	N/A	N/A	N/A	Jul. 15, 2022~ Jul. 16, 2022	N/A	Radiation (03CH07-HY)
USB Data Logger	TECPEL	TR-32	HE17XB2495	N/A	Mar. 07, 2022	Jul. 15, 2022~ Jul. 16, 2022	Mar. 06, 2023	Radiation (03CH07-HY)
EMI Test Receiver	Agilent	N9038A(MXE)	MY53290053	20Hz~26.5GHz	May 27, 2022	Jul. 15, 2022~ Jul. 16, 2022	May 26, 2023	Radiation (03CH07-HY)
Hygrometer	TECPEL	DTM-303A	TP201996	N/A	Nov. 16, 2021	Jul. 14, 2022~ Jul. 25, 2022	Nov. 15, 2022	Conducted (TH05-HY)
Power Meter	Anritsu	ML2495A	932001	N/A	Sep. 30, 2021	Jul. 14, 2022~ Jul. 25, 2022	Sep. 29, 2022	Conducted (TH05-HY)
Power Sensor	Anritsu	MA2411B	846202	300MHz~40GHz	Sep. 30, 2021	Jul. 14, 2022~ Jul. 25, 2022	Sep. 29, 2022	Conducted (TH05-HY)
Signal Analyzer	Rohde & Schwarz	FSV40	101566	10Hz~40GHz	Aug. 30, 2021	Jul. 14, 2022~ Jul. 25, 2022	Aug. 29, 2022	Conducted (TH05-HY)

—THE END—



## **Appendix A. Change List**

Item	Requirement	Feedback
1	The requirements of § 2.1043 are fulfilled, i.e., the device's block functions for the fundamental frequency, primary modulator circuit, maximum power, or field strength ratings shall remain unchanged.	Remains same fundamental frequency and max. power within the FCC 2.1043 requirements.
2	Transmitter PCB layout and parts changes are only permitted if there is no change in identifying a device's form, functional specification, as initially granted or previously approved under a Class II permissive change.	no change in identifying a device's form, functional specification
3	PCB changes are limited to non-substantive modifications layout changes to the same size physical circuit board previously granted.	PCB change does not impact substantive modifications.
4	C2PCPX is not permitted to add, remove, augment, or change capabilities, such as transmitters, increased bandwidth, additional rule parts, bands, etc.	Remains same radio characteristic without adding removing new RF characteristics and capabilities.
5	In the PAG submission for item C2PCPX, the applicant shall provide complete information on testing demonstrating that the proposed changes for fundamental emissions are unchanged within the normal, acceptable tolerances and out-of-band; emissions do not exceed the appropriate limits. The PAG submission shall include all applicable test reports and internal photos.	Complete testing to the EUT has been done to demonstrating that the proposed changes for fundamental emissions are unchanged within the normal, acceptable tolerances and out-of-band; emissions do not exceed the appropriate limits.
6	The modified device shall not be marketed under the existing grant of certification before confirmation that the C2PCPX PAG is approved and granted.	Modified unit will not be marketed until FCC permission change is approved.
7	Software Defined Radio (SDR) grants that use the C2PCPX procedure are not permitted to make subsequent Class III permissive changes.	The product was not certified as SDR
8	The C2PCPX PAG procedure has no impact on the provisions of V) of this publication for non-SDR software-only changes; thus, adding an equipment class when related to rule changes is still permitted.	The product was not certified as SDR  The requested change here does not add a new equipment class
9	Class I permissive changes are not permitted under this C2PCPX procedure.	The request is to file a c2pc under PAG C2PCPX procedure.