FCC RF Test Report

APPLICANT : Honeywell International Inc.

Honeywell Safety and Productivity Solutions

EQUIPMENT: RT10A

BRAND NAME : Honeywell MODEL NAME : RT10AL1N

FCC ID : HD5-RT10AL1N

STANDARD : FCC Part 15 Subpart C §15.225

CLASSIFICATION: (DXX) Low Power Communication Device Transmitter

This is a data re-used report which is only valid together with the original test report. We, Sporton International (Kunshan) Inc., 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 (Kunshan) Inc., the test report shall not be reproduced except in full.

Reviewed by: Jason Jia / Supervisor

JasonJia

Approved by: James Huang / Manager

Sporton International (Kunshan) Inc.

No. 1098, Pengxi North Road, Kunshan Economic Development Zone Jiangsu Province 215300
People's Republic of China

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Report No.: FR052222D

Report Version : Rev. 01

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Sporton International (Kunshan) Inc.

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REVISION HISTORY

Report No.: FR052222D

REPORT NO.	VERSION	DESCRIPTION	ISSUED DATE
FR052222D	Rev. 01	Initial issue of report	Aug. 27, 2020

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1. General Description

1.1 Applicant

Honeywell International Inc.

Honeywell Safety and Productivity Solutions

9680 Old Bailes Rd. Fort Mill, SC 29707 United States

1.2 Manufacturer

Honeywell International Inc.

Honeywell Safety and Productivity Solutions

9680 Old Bailes Rd. Fort Mill, SC 29707 United States

1.3 Product Feature of Equipment Under Test

Product Feature				
Equipment	RT10A			
Brand Name	Honeywell			
Model Name	RT10AL1N			
FCC ID	HD5-RT10AL1N			
EUT supports Radios application	CDMA/GSM/WCDMA/LTE/NFC/GNSS WLAN 2.4GHz 802.11b/g/n HT20 WLAN 5GHz 802.11a/n HT20/HT40 WLAN 5GHz 802.11ac VHT20/VHT40/VHT80 Bluetooth BR/EDR/LE			
HW Version	V1.0			
SW Version	OS.03.003-HON.02.001.DO			
EUT Stage	Identical Prototype			

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Remark: The above EUT's information was declared by manufacturer. Please refer to the specifications or user's manual for more detailed description.

1.4 Product Specification of Equipment Under Test

Standards-related Product Specification				
Tx/Rx Frequency Range 13.553 ~ 13.567MHz				
Channel Number	1			
Antenna Type	Loop Antenna			
Type of Modulation	ASK			

Remark: The above EUT's information was declared by manufacturer. Please refer to the specifications or user's manual for more detailed description.

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1.5 Modification of EUT

No modifications are made to the EUT during all test items.

1.6 Testing Location

Sporton International (Kunshan) Inc. is accredited to ISO/IEC 17025:2017 by American Association for Laboratory Accreditation with Certificate Number 5145.02.

Test Firm	Sporton International (Kunshan) Inc.				
Test Site Location	No. 1098, Pengxi North Road, Kunshan Economic Development Zone Jiangsu Province 215300 People's Republic of China TEL: +86-512-57900158 FAX: +86-512-57900958				
Test Site No.	Sporton Site No.	FCC Designation No.	FCC Test Firm Registration No. 314309		

1.7 Test Software

Item	Site	te Manufacture Na		Version	
1.	03CH02-KS	AUDIX	E3	6.2009-8-24a	

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1.8 Re-use of Measured Data

1.8.1 Introduction Section

This application re-uses data collected on a similar device. The subject device of this application (Model: RT10AL1N, FCC ID: HD5-RT10AL1N) is electrically identical to the reference device (Model: RT10AL0N, FCC ID: HD5-RT10AL0N) for the portions of the circuitry corresponding to the data being re-used, as treated by KDB Publication 484596 D01.

1.8.2 Difference Section

For details concerning the similarity with respect to component placement, mechanical/electrical design etc., please refer to the Product Equality Declaration.

The re-used RF data includes the following bands provided in Appendix B (Sporton RF Report No. FR052309D for the reference device Model: RT10AL0N, FCC ID: HD5-RT10AL0N).

1.8.3 Reference detail Section:

Equipment Class	Reference FCC ID	Folder Test	Report Title/Section	
DSS (BR/EDR) HD5-RT10AL0N		Part15C(FR052309A)	All sections applicable	
DTS (BLE)	HD5-RT10AL0N	Part15C(FR052309B)	All sections applicable	
DTS (WLAN)	HD5-RT10AL0N	Part15C(FR052309C)	All sections applicable	
DXX(NFC)	HD5-RT10AL0N	Part15C(FR052309D)	All sections applicable	

1.8.4 Spot Check Verification Data Section

In order to confirm hardware similarity of the subject device with the reference device, spot check measurements were performed on the subject device for the following test items, the test result were consistent with FCC ID: HD5-RT10AL0N.

Assertions concerning the similarity of these devices are based on representations by the applicant. The applicant accepts full responsibility for the validity of the similarity claim, and for the determination that verification test data are sufficient to support it.

Test Item	Mode HD5-RT10AL0N HD5-RT10AL1N Worst Result Worst Result		HD5-RT10AL1N Worst Result	Difference (dB)
	BT BR/EDR_Tx_Ch78	54.21	54.33	0.12
Radiated Spurious Emission (dBuV/m)	BT5.0 _Tx_Ch39	48.53	46.21	2.32
	11g_Tx_Ch11	50.69	50.61	0.08
	NFC	32.90	33.77	0.87

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2. List of Measuring Equipment

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Test Date	Due Date	Remark
EMI Test Receiver	R&S	ESR7	101403	9kHz~7GHz;Ma x 30dBm	Oct. 18, 2019	Jul. 10, 2020	Oct. 17, 2020	Radiation (03CH02-KS)
Loop Antenna	R&S	HFH2-Z2	100321	9kHz~30MHz	Nov. 10, 2019	Jul. 10, 2020	Nov. 09, 2020	Radiation (03CH02-KS)
Bilog Antenna	TeseQ	CBL6111D	44483	30MHz-1GHz	Dec. 30, 2019	Jul. 10, 2020	Dec. 29, 2020	Radiation (03CH02-KS)
Amplifier	SONOMA	310N	187289	9KHz-1GHz	Jan. 02, 2020	Jul. 10, 2020	Jan. 01, 2021	Radiation (03CH02-KS)
AC Power Source	Chroma	61601	616010002 473	N/A	NCR	Jul. 10, 2020	NCR	Radiation (03CH02-KS)
Turn Table	MF	MF7802	N/A	0~360 degree	NCR	Jul. 10, 2020	NCR	Radiation (03CH02-KS)
Antenna Mast	MF	MF7802	N/A	1 m~4 m	NCR	Jul. 10, 2020	NCR	Radiation (03CH02-KS)

NCR: No Calibration Required

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Appendix B. Reference Report

Please refer to Sporton report number FR052309D which is issued separately.

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