

Test Report Serial No.:	011712UL3-T	1150-E15F	Report Issue Date:	Mar. 15, 2012
Measurement Date(s):	01/26-27, 2/2	1, 3/14, 2012	Report Revision No.:	Revision 1.1
FCC Rule Part(s):	47 CFR §2; §	15.249	FCC Test Firm Reg. No.:	Accredited
IC Standard(s):	RSS-210	RSS-Gen	IC Test Site No.:	IC 3874A-1



DECLARATION OF CO	MPLIAN	CE	RF MEASUREMENT REPORT	FCC & IC				
Test Lab Information	Name	ne CELLTECH LABS INCORPORATED						
Test Lab Illiorniation	Address	21-364 Lougheed Road, Kelowna, British Columbia V1X 7R8 Canada						
Toot Lab Pagistration No.(a)	FCC	Accre	dited (ISO 17025 - A2LA Test Lab Certificate No. 24	70.01)				
Test Lab Registration No.(s)	IC	3874	۸-1					
Applicant Information	Name	RFINI	O SYSTEMS, INC.					
Applicant Information	Address	Suite	201, 1405 St. Paul Street, Kelowna, British Columbia	a V1Y 2E4 Canada				
	FCC	47 CF	R Part 2, 15.249, 15.205, 15.209					
Standard(s) & Procedure(s)	IC	RSS-2	210 Issue 8; RSS-Gen Issue 3					
	ANSI	C63.4-2003						
De les Oberelles de la	FCC	DXT - Part 15 Low Power Transceiver, Rx Verified						
Device Classification(s)	IC	Low-power Licence-exempt Radiocommunication Device (Category 1)						
Application Type	FCC/IC	New 0	Certification					
Device Idea((Conte)	FCC ID:	UL3PT100						
Device Identifier(s)	IC:	6721A-PT100						
Device Under Test (DUT)	RFID Active	e Tag						
Device Model(s) Tested	PT100							
Measurement Date(s)	Jan. 26-27,	Feb. 2	1, Mar. 14, 2012					
Test Sample Receipt Date	January 17	, 2012						
Test Sample Serial No.(s)	#3 Identical	l Protot	уре					
Transmit Frequency Band	902 - 928 N	ИНz (IS	M)					
Transmitter Operating Freq.	902.2 - 927	.8 MHz						
Modulation Type(s)	FSK	FSK						
Duty Cycle Measured	0.7 % (7ms	on-tim	e / 1s off-time)					
Antenna Type(s) Tested	Integrated [	Dipole						
Antenna Gain Specification	0 dBi							

This wireless device has demonstrated compliance with the applicable technical standards as indicated in the measurement report and was tested in accordance with the measurement procedures specified in FCC 47 CFR Rule Part 2 and Rule Part 15.249; Industry Canada RSS-210 Issue 8 and RSS-Gen Issue 3; and ANSI C63.4-2003.

I attest to the accuracy of data. All measurements were performed by me or were made under my supervision and are correct to the best of my knowledge and belief. I assume full responsibility for the completeness of these measurements and vouch for the qualifications of all persons taking them.

The results and statements contained in this report pertain only to the device(s) evaluated.

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3.6 V Internal Lithium Cell (x2)

Test Report Approved By

**Power Source(s) Tested** 

Juan Johns

**Sean Johnston** 

**Lab Manager** 

Celltech Labs Inc.

Applicant:	RFind Systems, Inc.		FCC ID:	UL3PT100		IC:	6721A-PT100		
DUT Model:	PT10	00	DUT Type:	RFID Active	Tag Transmitter From		eq. Range:	902.2 - 927.8 MHz	Klind
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Applicant:	RF	RFind Systems, Inc.		FCC ID:	FCC ID: UL3PT100		IC:	6721A-PT100	ODT.	
DUT Model:	PT1	00	DUT Type:	RFID Active	Tag	g Transmitter Freq. Ran		Transmitter Freq. Range: 902.2 - 927.8 MHz		Kirind
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IC Standard(s):	RSS-210 RSS-Gen		IC Test Site No.:	IC 3874A-1



TEST SUMMARY										
F	Referenced Standard(s):	FCC	CFR Title 47 Part 1	5 Subpart C	;					
Appendix	Description of Test	Procedure Reference	<u>Limit Reference</u>	Test Start	Test End	Result				
Α	Field Strength of Fundamental	ANSI C63.4-2003	§15.249	14Mar12	14Mar12	Pass				
А	Field strength of harmonics and spurious emissions	ANSI C63.4-2003	§15.249, §15.209 §15.205	26Jan12	27Jan12	Pass				
В	Occupied Bandwidth	ANSI C63.4-2003	§2.202(a)	26Jan12	26Jan12	Pass				
С	Compliance with Part 15.215(c)	ANSI C63.4:2003	§15.215(c)	21Feb12	21Feb12	Pass				
F	Referenced Standard(s):	Industry Canada RSS-210 Issue 8								
<u>Appendix</u>	Description of Test	Procedure Reference	<u>Limit Reference</u>	Test Start	Test End	Result				
А	Field Strength of Fundamental	ANSI C63.4-2003	RSS-Gen §7.2.5	14Mar12	14Mar12	Pass				
Α	Field strength of harmonics and spurious emissions	ANSI C63.4-2003	RSS-Gen §7.2.2 RSS-Gen §7.2.5	26Jan12	27Jan12	Pass				
В	Occupied Bandwidth	ANSI C63.4-2003	RSS-Gen §4.6.1	26Jan12	26Jan12	Pass				
С	Compliance with RSS-Gen §7.2.6	RSS-Gen §7.2.6	RSS-Gen §4.7	21Feb12	21Feb12	Pass				

## **REVISION LOG**

Revision	Description	Implemented By	Implementation Date	
1.0	1st Release	Jon Hughes	February 22, 2012	
	2 <sup>nd</sup> Release		March 15, 2012	
1.1	Field Strength of Fundamental Data     revised Section 5.3     added Section A.6	Jon Hughes		

## **SIGNATORIES**

Prepared By	Jun Johns	March 15, 2012
Name/Title	Sean Johnston / Lab Manager	Date

Applicant:	RF	RFind Systems, Inc.		FCC ID:	FCC ID: UL3PT100		IC:	6721A-PT100	
DUT Model:	PT1	00	DUT Type:	RFID Active	Tag Transmitter Fre		eq. Range:	902.2 - 927.8 MHz	RFind
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### 1.0 **SCOPE**

This report outlines the measurements made and results collected during electromagnetic emissions testing of the RFind Systems, Inc. Model: PT100 RFID Active Tag. The measurement results were applied against the applicable EMC requirements and limits outlined in the technical rules and regulations set forth in the Federal Communication's Commission Code of Federal Regulations Title 47 Part 15 Subpart C and Industry Canada Radio Standards Specification RSS-210 Issue 8 and RSS-Gen Issue 3.

#### 2.0 REFERENCES

#### 2.1 Normative References

ANSI/ISO 17025:2005 General Requirements for competence of testing and calibration laboratories

IEEE/ANSI C63.4-2003 Methods of Measurement of Radio-Noise Emissions from Low-Voltage Electrical and Electronic

Equipment in the Range of 9 kHz to 40 GHz

CFR Title 47 Part 15C Code of Federal Regulations

Telecommunication Title 47: Part 15C: Intentional Radiators

IC Spectrum Management &

Radio Standards Specification

**Telecommunications Policy** RSS-210 Issue 8 - Low-Power Licence-Exempt Radiocommunication Devices (All Frequency

Bands): Category I Equipment

RSS-Gen Issue 3 - General Requirements and Information for the Certification of

Radiocommunication Equipment

#### 3.0 PASS/FAIL CRITERIA

Unless otherwise noted in the Appendices, the pass/fail criteria is the limit set forth in the reference standards. The DUT is considered to have passed the requirements if the data collected during the described measurement procedure is not above the specified limits as defined. The pass/fail statements made in this report only apply to the unit tested.

Applicant:	RFind Systems, Inc.		FCC ID:	FCC ID: UL3PT100		IC:	6721A-PT100			
DUT Model:	PT1	00	DUT Type:	RFID Active	RFID Active Tag Transmitter Free		e Tag Transmitter Freq. Range: 902.2 - 927.		902.2 - 927.8 MHz	
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IC Standard(s):	RSS-210	RSS-Gen	IC Test Site No.:	IC 3874A-1



## 4.0 FACILITIES AND ACCREDITATIONS

The facilities used in collecting the test results outlined in this report are located at 21-364 Lougheed Road, Kelowna, British Columbia, Canada V1X 7R8. The radiated emissions site conforms to the requirements set forth in ANSI C63.4 and is filed and listed with the FCC as an Accredited Test Firm and with Industry Canada under Test Site File Number IC 3874A-1.

## **5.0 GENERAL INFORMATION**

#### 5.1 Applicant Information

Company Name	RFIND SYSTEMS, INC.
Address	Suite 201, 1405 St. Paul Street
	Kelowna, British Columbia V1Y 2E4
	Canada
FCC Grantee Code	UL3
IC Company No.	6721A

## 5.2 DUT Description

Device Type	RFID Active	RFID Active Tag			
Device Model(s) Tested	PT100	PT100			
Device Identifier(s)	FCC ID:	UL3PT100			
Device Identifier(e)	IC:	6721A-PT100			
Power Source Tested	3.6V Intern	3.6V Internal Lithium Cell (x2)			
Antenna Type Tested	Integrated Dipole				
Antenna Gain Specification	0 dBi				

### 5.3 Mode(s) of Operation Tested

Transmit Frequency Band	902 - 928 MHz (ISM)
Transmitter Operating Freq.	902.2 - 927.8 MHz
Transmitter Test Mode(s)	Test mode #1: Tx set to continuously transmit the modulated signal (fundamental emissions).  Test mode #2: TX set to continuously transmit the carrier (spurious emissions).  Test mode #3: Tx set to transmit at the maximum duty cycle of 0.7%, with the on time set to 7 ms and the period set to 1 s
Modulation Type(s)	FSK

## 5.4 Modification(s)

None

Applicant:	RF	RFind Systems, Inc.		FCC ID:	UL3PT100		UL3PT100 IC: 6721A-PT100		RFind	
DUT Model:	PT1	00	DUT Type:	RFID Active	Tag	Transmitter Fr	eq. Range:	902.2 - 927.8 MHz	LKI rind	
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Appendix A Field Strength of the Fundamental and Spurious Emissions

A.1 REFERENCES					
Normative Reference Standard	FCC CFR 47 §15.249; §15.209; §15.205; IC RSS-210 Issue 8; RSS-Gen				
Procedure Reference	ANSI C63.4:2003				

A.2 LIMITS							
FCC CFR 47 §15.35(b)	When average radiated emission measurements are specified in this part, including average emission measurements below 1000 MHz, there also is a limit on the peak level of the radio frequency emissions. Unless otherwise specified, the limit on peak radio frequency emissions is 20 dB above the maximum permitted average limit applicable to the equipment under test.						
FCC CFR 47	Fundamental Frequency		Strength of Fund	amental (mV/m)			
§15.249(a)	902-928 MHz		50 (93.98 dBuV/r	n)			
FCC CFR 47 §15.249(a)	Except as provided in paragraph (b) of this section, the field strength of emissions from intentional radiators operated within these frequency bands shall comply with the following:						
	Fundamental Frequency		Strength of harm	onics (uV/m)			
	902-928 MHz		500 (53.98 dBuV/m)				
FCC CFR 47 §15.249(d)	Emissions radiated outside the specified frequency bands, except for harmonics, shall be attenuated by at least 50 dB below the level of the fundamental or to the general radiated emission limits in §15.209, whichever is the lesser attenuation.						
FCC CFR 47 §15.209(a)	Except as provided elsewhere in the field strength levels specified in			ntentional radiator shall not exceed			
	Frequency (MHz)	Field Strength (u)	V/m)	Measurement Distance (m)			
	0.009-0.490	2400/F(kHz)		300			
	0.490-1.705	24000/F(kHz)		30			
	1.705-30	30		30			
	30-88	100		3			
	88-216	150		3			
	216-960	200		3			
	Above 960	500		3			

A.3 ENVIRONMENTAL CONDITIONS				
Temperature	25 +/- 5 °C			
Humidity	40 +/- 10 %			
Barometric Pressure	101 +/- 3 kPa			

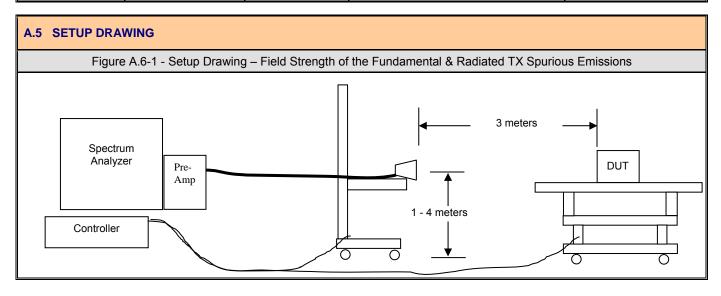
Applicant:	RF	Find Systems, Inc.		FCC ID:		UL3PT100 IC:		UL3PT100 IC: 6721A-PT100		<b>R</b> Find	
DUT Model:	PT1	00	DUT Type:	RFID Active	Tag	ag Transmitter Freq. Rai		902.2 - 927.8 MHz	IXTING		
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A.4 EQUIPMENT LIST									
ASSET NUMBER	MANUFACTURER	MODEL	DESCRIPTION	CAL DUE					
00051	HP	8566B	Spectrum Analyzer RF Section	09Apr12					
00049	HP	85650A	Quasi-peak Adapter	09Apr12					
00047	HP	85685A	RF Preselector	09Apr12					
00072	EMCO	2075	Mini-mast	n/a					
00073	EMCO	2080	Turn Table	n/a					
00071	EMCO	2090	Multi-Device Controller	n/a					
00030	HP	83017A	Microwave system amplifier	n/a					
00015	Agilent	E4408B	Spectrum Analyzer	23Apr12					
00050	Chase	CBL-6111A	Bilog Antenna	15Mar12					
00055	EMCO	3121C	Dipole Antenna	04Apr12					
00034	ETS	3115	Double Ridged Guide Horn	03Apr12					



Applicant:	RFin	nd Sy	stems, Inc.	FCC ID:		UL3PT100	IC:	6721A-PT100
DUT Model:	PT10	0	DUT Type:	RFID Active	Tag Transmitter Freq. Range:		902.2 - 927.8 MHz	
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#### Procedure for determining the average value of pulsed emissions (ANSI C63.4:2003)

When the average value of the pulsed emissions from an DUT must be determined, the average can be found by measuring the peak pulse amplitude and determining the duty cycle correction factor of the pulse modulation. The duty cycle correction factor  $\delta$  may be expressed in terms of dB as

 $\delta$  (dB) =  $20\log(\delta)$ 

This correction factor can then be applied to the peak pulse amplitude to find the average. This correction is applied for all emissions including the fundamental and harmonics. The duty cycle correction is determined as follows:

- a) Couple the final radio frequency output signal to the input of a spectrum analyzer. This can be performed by a radiated, direct connect or a "near-field" coupling method. The signal received must be of sufficient level to adequately trigger the spectrum analyzer swept display.
- b) Adjust the center frequency of the spectrum analyzer to the center of the RF signal
- c) Set the spectrum analyzer for ZERO SPAN
- d) Adjust the SWEEP TIME to obtain at least a 100 ms period of time on the horizontal display axis of the spectrum analyzer.
- e) Set the TRIGGER on the spectrum analyzer to capture the greatest amount of "on time" for pulse train length less than 100 ms, or the greatest amount of "on time" in 100 ms for pulse train length greater than 100 ms.
- f) Determine the total "on time" for one pulse train (or 100 ms).
- g) The duty cycle correction factor is the total "on time" divided by the period of the pulse train (or 100 ms)

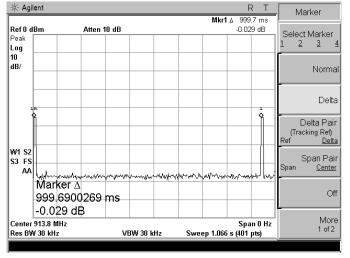
Test Results:

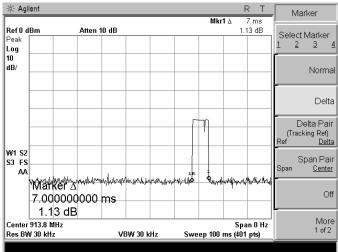
Tp = 1s therefore Tp = 100ms

Ton = 7 ms

 $\delta$  (dB) = 20 Log(7/100) = -23.1 dB

Test Procedure: As described in ANSI C63.4:2003





Applicant:	RF	ind Sy	stems, Inc.	FCC ID:		UL3PT100	IC:	6721A-PT100	DE.	
DUT Model:	PT1	00	DUT Type:	RFID Active	Tag	Transmitter Freq. Range:		902.2 - 927.8 MHz	Kurind	
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## A.6 TEST RESULTS

lamental	

Frequency	Antenna Pol.		E-Field (Peak)	Limit (Peak)	Margin (Peak)	
[MHz]	V/H	DUT Orientation	[dBuV/m]	[dBuV/m]	[dB]	Result
907.6	V	Х	67.1	93.98	26.88	Pass
907.6	Н	X	77.2	93.98	16.78	Pass
915	V	X	70.9	93.98	23.08	Pass
915	Н	X	82	93.98	11.98	Pass
920	V	X	68.1	93.98	25.88	Pass
920	Н	X	78.9	93.98	15.08	Pass

# A.7 TEST RESULTS

Spurious Emission	S
-------------------	---

Spurious E	missions	7			1	1	1	•		
Frequency	Antenna Pol.	DUT	E-Field	δ (dB)	Corrected E-Field	Limit	Limit (Peak)	Margin	Margin (Peak)	
[MHz]	V/H	Orientation	[dBuV/m]	[dB]	[dBuV/m]	[dBuV/m]	[dBuV/m]	[dB]	[dB]	Result
1815.2	V	Х	61.0	-23.1	37.9	53.98	73.98	16.1	13.0	Pass
1815.2	Н	Χ	65.0	-23.1	41.9	53.98	73.98	12.1	9.0	Pass
*2722.8	V	Х	68.4	-23.1	45.3	53.98	73.98	8.7	5.6	Pass
*2722.8	Н	Χ	71.9	-23.1	48.8	53.98	73.98	5.1	2.0	Pass
*3630.4	V	Х	58.5	-23.1	35.4	53.98	73.98	18.6	15.5	Pass
*3630.4	Н	Х	63.0	-23.1	39.9	53.98	73.98	14.1	11.0	Pass
*4538	V	Х	58.1	-23.1	35.0	53.98	73.98	18.9	15.8	Pass
*4538	Н	Х	64.8	-23.1	41.7	53.98	73.98	12.2	9.1	Pass
1830	V	Х	61.8	-23.1	38.7	53.98	73.98	15.3	12.2	Pass
1830	Н	Х	65.9	-23.1	42.8	53.98	73.98	11.2	8.1	Pass
*2745	V	Х	64.8	-23.1	41.7	53.98	73.98	12.3	9.2	Pass
*2745	Н	Х	70.9	-23.1	47.8	53.98	73.98	6.2	3.1	Pass
*3660	V	Х	nf	-23.1	na	53.98	73.98	na	na	Pass
*3660	Н	Х	nf	-23.1	na	53.98	73.98	na	na	Pass
*4575	V	Х	61.1	-23.1	38.0	53.98	73.98	16.0	12.9	Pass
*4575	Н	Х	62.6	-23.1	39.5	53.98	73.98	14.5	11.4	Pass
1840	V	Х	55.6	-23.1	32.5	53.98	73.98	21.5	18.4	Pass
1840	Н	Х	59.2	-23.1	nf	53.98	73.98	na	na	Pass
*2760	V	Х	61.1	-23.1	38.0	53.98	73.98	16.0	12.9	Pass
*2760	Н	Х	68.3	-23.1	45.2	53.98	73.98	8.8	5.7	Pass
*3680	V	Х	nf	-23.1	na	53.98	73.98	na	na	Pass
*3680	Н	Х	nf	-23.1	na	53.98	73.98	na	na	Pass
*4600	V	Х	nf	-23.1	na	53.98	73.98	na	na	Pass
*4600	Н	Х	59.7	-23.1	36.6	53.98	73.98	17.4	14.3	Pass

Applicant:	RF	ind Sy	stems, Inc.	FCC ID:	FCC ID:		UL3PT100 IC:			
DUT Model:	PT1	00	DUT Type:	RFID Active	Tag	Transmitter Freq. Range:		902.2 - 927.8 MHz	Klind	
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#### Note:

1. Radiated spurious emissions were measured at the lowest radio frequency signal generated up to the 10<sup>th</sup> harmonic.

#### Remarks:

- 1) E-Field = Antenna Factor + Cable Loss + Meter Reading Amp Gain
- 2) Peak Limit = Average Limit + 20dB
- 3) All DUT Orientations investigate, only highest reported for spurious emissions.
- 4) Infindicates emission not detectable above noise floor.
- 5) na indicates not applicable
- 6) Remark "\*" means restricted band
- 7) DUT orientations: x = Vertical, Y = Side, Z=Side rotated 90°

### **Example Calculations:**

Margin Calculation: Margin = Limit – (Corrected E-Field)

Applicant:	RF	Find Systems, Inc.		FCC ID: UL3PT100 IC:		6721A-PT100			
DUT Model:	PT1	00	DUT Type:	RFID Active	Active Tag Transmitter Freq. Range:		eq. Range:	902.2 - 927.8 MHz	Klind
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Measurement Date(s):	01/26-27, 2/2	1, 3/14, 2012	Report Revision No.:	Revision 1.1
FCC Rule Part(s):	47 CFR §2; §	15.249	FCC Test Firm Reg. No.:	Accredited
IC Standard(s):	RSS-210	RSS-Gen	IC Test Site No.:	IC 3874A-1



## **A.8 SETUP PHOTOGRAPHS**

# **DUT Orientation X**



Applicant:	RF	ind Systems, Inc.		RFind Systems, Inc. FCC ID: UL3PT100 IC:		6721A-PT100			
DUT Model:	PT1	00	DUT Type:	RFID Active	Tag	Transmitter Fr	eq. Range:	902.2 - 927.8 MHz	Klind
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IC Standard(s):	RSS-210	RSS-Gen	IC Test Site No.:	IC 3874A-1



Appendix B Occupied Bandwidth

B.1 REFERENCES	
Normative Reference Standard	FCC CFR 47 §2.202(a); IC RSS-Gen Issue 8
Procedure Reference	ANSI C63.4:2003

B.2 DESCRIPTION	B.2 DESCRIPTION					
FCC CFR 47 §2.202(a)	Occupied bandwidth. The frequency bandwidth such that, below its lower and above its upper frequency limits, the mean powers radiated are each equal to 0.5 percent of the total mean power radiated by a given emission. In some cases, for example multichannel frequency-division systems, the percentage of 0.5 percent may lead to certain difficulties in the practical application of the definitions of occupied and necessary bandwidth; in such cases a different percentage may prove useful.					
IC RSS-Gen Section 4.6.1	When an occupied bandwidth value is not specified in the applicable RSS, the transmitted signal bandwidth to be reported is to be its 99% emission bandwidth, as calculated or measured.					

B.3 ENVIRONMENTAL CONDITIONS				
Temperature	25 +/- 5 °C			
Humidity	40 +/- 10 %			
Barometric Pressure	101 +/- 3 kPa			

ASSET NUMBER	MANUFACTURER	MODEL	DESCRIPTION	CAL DUE	
00015	Agilent	E4408B	Spectrum Analyzer	23Apr12	

B.4 SETUP DRAWING			
Figure E	3.4-1 - Setup Drawir	ng – Occupied Bandwidth	
	DUT	Spectrum Analyzer	

Applicant:	RF	RFind Systems, Inc.		RFind Systems, Inc. FCC ID: UL3PT100 IC:		6721A-PT100			
DUT Model:	PT1	00	DUT Type:	RFID Active	Tag	Transmitter Freq. Range:		902.2 - 927.8 MHz	Klind
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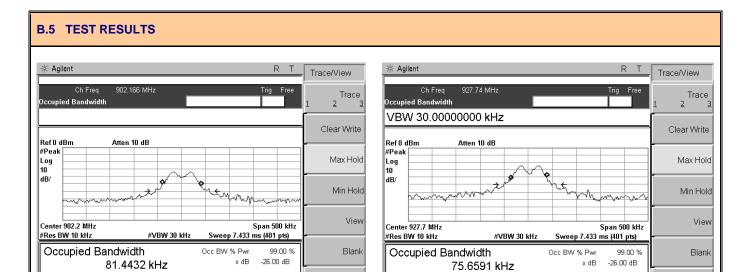
Transmit Freq Error x dB Bandwidth

226.977 Hz 113.436 kHz

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More 1 of 2



More 1 of 2

Transmit Freq Error x dB Bandwidth

1.095 kHz 108.086 kHz

B.6 EMISSION DESIGNATOR					
Normative Reference Standard	FCC CFR 47 §2.201, §2.202; IC RSS-Gen Issue 3				
Type of Modulation	Frequency Shift Keying (FSK)				
Emission Designator	81K4F1D				
K = kHz					
F = Frequency Modulation					
1 = A single channel containing quantized or digital information without the use of a modulating sub-carrier					
D = Data Transmission					

Applicant:	RFind Systems, Inc.		FCC ID:		UL3PT100 IC:		6721A-PT100		
DUT Model:	PT1	00	DUT Type:	RFID Active	Tag	Transmitter Freq. Range:		902.2 - 927.8 MHz	Rifind
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FCC Rule Part(s): 47 CFR §2; §15.249			FCC Test Firm Reg. No.:	Accredited
IC Standard(s):	RSS-210	RSS-Gen	IC Test Site No.:	IC 3874A-1



Appendix C Compliance with Part 15.215(c) & IC RSS-Gen §7.2.6

A.1. REFERENCES	
Normative Reference Standard	FCC CFR 47 §15.215(c); IC RSS-Gen §7.2.6
Procedure Reference	ANSI C63.4:2003

A.2. LIMITS	
FCC CFR 47 §15.215(c)	Intentional radiators operating under the alternative provisions to the general emission limits, as contained in 15.217 through 15.257 and in Subpart E of this part, must be designed to ensure that the 20 dB bandwidth of the emission, or whatever bandwidth may otherwise be specified in the specific rule section under which the equipment operates, is contained within the frequency band designated in the rule section under which the equipment is operated. The requirement to contain the designated bandwidth of the emission within the specified frequency and includes the effects from frequency sweeping, frequency hopping and other modulation techniques that may be employed as well as the frequency stability of the transmitter over expected variations in temperature and supply voltage. If a frequency stability is not specified in the regulations, it is recommended that the fundamental emission be kept within at least the central 80% of the permitted band in order to minimize the possibility of out-of-band operation.
IC RSS-Gen §7.2.6	If the frequency stability of the licence-exempt radio apparatus is not specified in the applicable standards, measurement of the frequency stability is not required provided that the occupied bandwidth of the licence-exempt radio apparatus lies entirely outside the restricted bands of Table 1 and the prohibited TV bands of 54-72 MHz, 76-88 MHz, 174-216 MHz, 470-608 MHz and 614-806 MHz.

A.3. ENVIRONMENTAL CONDITIONS					
Temperature	25 <u>+</u> 5 °C				
Humidity	35 <u>+</u> 5 %RH				
Barometric Pressure	uncontrolled				

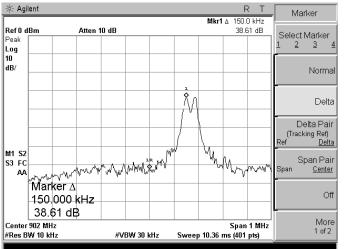
ID	ASSET NUMBER	MANUFACTURER	MODEL	DESCRIPTION	CAL DUE
1	00072	00072 HP E4408B		Spectrum Analyzer	23Apr12
2	0003	0003 HP		Frequency Counter	09Apr12
3	00207 VWR		61161-378	Temperature Sensor	23Apr12

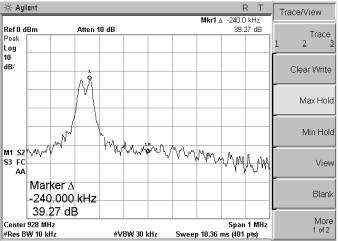
Applicant:	RF	RFind Systems, Inc.		FCC ID:		UL3PT100 IC:		6721A-PT100	O Control	
DUT Model:	PT1	00	DUT Type:	RFID Active	Tag	Transmitter Freq. Range:		902.2 - 927.8 MHz	Klind	
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FCC Rule Part(s): 47 CFR §2; §15.249			FCC Test Firm Reg. No.:	Accredited
IC Standard(s):	RSS-210 RSS-Gen		IC Test Site No.:	IC 3874A-1







### **High Channel**

Temperature (degrees C)	Frequency @ 20C (MHz)	Measured Frequency (MHz)	Deviation (%)	Deviation (kHz)
-30	927.7441720	927.7371080	-0.000761%	-7.064
-20	927.7441720	927.7424160	-0.000189%	-1.756
-10	927.7441720	927.7456200	0.000156%	1.448
0	927.7441720	927.7465990	0.000262%	2.427
10	927.7441720	927.7459320	0.000190%	1.76
20	927.7441720	927.7441720	0.000000%	0
30	927.7441720	927.7434040	-0.000083%	-0.768
40	927.7441720	927.7418880	-0.000246%	-2.284
50	927.7441720	927.7414090	-0.000298%	-2.763

#### **Low Channel**

Temperature (degrees C)	Assigned Frequency (MHz)	Measured Frequency (MHz)	Deviation (%)	Deviation (kHz)
-30	902.1660180	902.1550640	-0.001214%	-10.954
-20	902.1660180	902.1607000	-0.000589%	-5.318
-10	902.1660180	902.1646350	-0.000153%	-1.383
0	902.1660180	902.1663920	0.000041%	0.374
10	902.1660180	902.1666900	0.000074%	0.672
20	902.1660180	902.1660180	0.000000%	0
30	902.1660180	902.1654890	-0.000059%	-0.529
40	902.1660180	902.1650090	-0.000112%	-1.009
50	902.1660180	902.1654040	-0.000068%	-0.614

	Voltage (V)			ii	ii
	Nominal 3.6	(85%) 3.06	(115% )4.14	Deviation %	Deviation %
Low CH	902.166255	902.166178	902.166198	-0.0000085%	-0.0000063%
High CH	927.744858	927.744661	927.744784	-0.0000212%	-0.0000080%

The requirement to contain the designated bandwidth of the emission within the specified frequency is met.

Applicant:	RF	RFind Systems, Inc.		FCC ID:	FCC ID: UL3PT100 IC:		6721A-PT100		
DUT Model:	DUT Model: PT100		DUT Type:	RFID Active	Tag Transmitter Freq. Range:		902.2 - 927.8 MHz	IKIrind	
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IC Standard(s):	RSS-210	RSS-Gen	IC Test Site No.:	IC 3874A-1



# **END OF DOCUMENT**

Applicant:	Applicant: RFind Systems, Inc.		FCC ID:	UL3PT100		IC:	6721A-PT100		
DUT Model:	PT1	00	DUT Type:	RFID Active	Tag	ag Transmitter Freq. Range:		902.2 - 927.8 MHz	RFind
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