

Intentional Radiator Test Report

Test Standards: FCC Part 15.225 (Subpart C – Intentional Radiators) Industry Canada RSS-210, Issue 8

> Prepared For: Socket Mobile, Inc. 39700 Eureka Drive Newark, CA 54560

Product Name : NFC Reader-Scan Card

> Model Name : CF RFID 6E2

Application Purpose : Original

Prepared by:

EMCE Engineering, Inc. 44366 S. Grimmer Blvd. Fremont, CA 94538 USA

This report only responds to the tested sample and may not be reproduced, except in full, without written approval of the EMCE Engineering, Inc.

Page 1 of 26



Revision History

Rev.	Issue Date	Description
0	4/28/14	Initial Issue



TABLE OF CONTENTS

1.	GENERAL INFORMATION	4
2.	EUT AND ACCESSORY INFORMATION	5
3.	SUMMARY OF TEST RESULTS	6
4.	MODIFICATIONS	7
5.	TEST RESULTS	8
6.	TEST EQUIPMENT	26



1.0 GENERAL INFORMATION

Test Laboratory:	EMCE Engineering
	44366 S. Grimmer Blvd.
	Fremont, CA 94538
	USA
	Tel: 510-490-4307, Fax: 510-490-3441
	bob@universalcompliance.com
	FCC registration number : 743299
	Test Site : FCC : US5291, IC : 3324A
Applicant Name :	Socket Mobile, Inc.
	39700 Eureka Drive
	Newark, CA 54560
	Tel: 510-933-3300
	Contact Person: Tim Miller
Application Purpose :	Original
EUT Description	NFC Reader-Scan Card
Product Name	NFC Reader-Scan Card
Model Name :	CF RFID 6E2
Applied Standards :	47 CFR §15.207, 15.209, 15.225: 2010 &
	Canadian Standards RSS-GEN Issue 3, RSS-210 Issue 8
FCC ID :	LUBCF6V2
IC :	2529A-CF6V2
RF Operating Frequency (ies)	13.56MHz
Modulation	ASK
Emission Designator	16K6K1D
Receipt of EUT :	4/4/14
Date of Testing :	4/8/14 - 4/28/14
Date of Report :	4/28/14

The tests listed in this report have been completed to demonstrated compliance to the CFR 47 Section 15.225, as well as Industry Canada Radio Standard RSS-210, Issue 8.

Contents approved:

Name: Bob Cole Title: President



2.0 EUT AND ACCESSORY INFORMATION

EUT												
Model name:		CF RFI	D 6E2									
Description:		NFC Reader-Scan Card (13.56MHz)										
Manufacturer:		Socket Mobile, Inc.										
	Support Equipment											
Description	Model Number	Serial Number	Manufacturer	Power Cable Description								
PDA	SoMo 655	N/A	Socket Mobile	Unshielded / 1 Meter								
	Cable L	Description										
From	То	Length (Meters)	Shielded (Y/N)	Ferrite Loaded (Y/N)								
PDA	Power	1.5	Y	N								



3.0 SUMMARY OF TEST RESULTS

Test S	Standard		Deco
47 CFR Part 15.225: 2010	RSS 210 Issue 8	Description	Pass / Fail
15.203		Antenna Requirement	Pass
15.207(a)	RSS Gen(7.2.2)	Conducted Emissions Voltage	Pass
15.225(a)	RSS210(A2.6)	Limit in the band of 13.553 – 13.567 MHz	Pass
15.225(b)	RSS210(A2.6)	Limit in the band of 13.410 – 13.553 MHz and 13.567 – 13.710 MHz	Pass
15.225(c)	RSS210(A2.6)	Limit in the band of 13.110 – 13.410 MHz and 13.710 – 14.010 MHz	Pass
15.225(d), 15.209	RSS210(A2.6)	Limit outside the band of 13.110 – 14.010 MHz	Pass
15.225(e)	RSS210(A2.6)	Frequency Stability	Pass
	RSS-210(5.9.1)	Occupied Bandwidth	Pass
ANSI C63.4: 2009/ RSS-0	Gen Issue 3		1
PS: All measurement unc	ertainties are not taken into	consideration for all presented test result.	

- PASS The EUT passed that particular test.
- FAIL The EUT failed that particular test.
- N/A Not Applicable due to product type.



4.0 MODIFICATIONS

There were no modifications.



5.0 TEST RESULTS

5.1 Antenna Requirement

Requirement(s): 47 CFR §15.203

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.

Antenna requirement must meet at least one of the following:

- a) Antenna must be permanently attached to the device.
- b) Antenna must use a unique type of connector to attach to the device.
- c) Device must be professionally installed. Installer shall be responsible for ensuring that the correct antenna is employed with the device.
- 1) The RFID antenna is integral to the main board permanently to the device which meets the requirement (See Internal Photographs submitted as another Exhibit).



5.2 Conducted Emissions Voltage

Requirement(s): 47 CFR §15.207

Requirement:

	Conducted limit (dBµV)			
Frequency of emission (MHz)	Quasi-peak	Average		
0.15–0.5	66 to 56*	56 to 46*		
0.5–5	56	46		
5–30	60	50		

*Decreases with the logarithm of the frequency.

Procedures:

- 1. All possible modes of operation were investigated. Only the 6 worst case emissions measured, using the correct CISPR and Average detectors, are reported. All other emissions were relatively insignificant.
- 2. A "-ve" margin indicates a PASS as it refers to the margin present below the limit line at the particular frequency.
- Conducted Emissions Measurement Uncertainty
 All test measurements carried out are traceable to national standards. The uncertainty of
 measurement at a confidence level of approximately 95% (in the case where distributions
 normal), with a coverage factor of 2, in the range 9kHz 30MHz (Average & Quasi-peak)
 ±3.5dB.

 Environmental Conditions Temperature 24°C
- 4. Environmental Conditions Temperature 24°C Relative Humidity 45% Atmospheric Pressure 1010mbar

Test Date : 4/8/2014

Tested By : Bob Cole

Results: Pass



FCC Part 15.207 Line Conducted Emissions 120V / 60 Hz - Line 1 150kHz – 30 MHz

Test Location: EMCE Engineering •44366 S. Grimmer Blvd • Fremont, CA 94538 •

Customer: Specification: Work Order #: Test Type: Equipment: Manufacturer: Model: S/N:	EN55 4030 Cond NFC Socke	et Mobile, Inc. 022 B COND [QP] ucted Emissions Reader-Scan Card et Mobile FID 6E2			4/8/2014 11:34:21 AM 1 Bob Cole 120V 60Hz	I
Test Equipment	:					
Function	S/	/N	Calibration Date	Cal Due	Date	Asset #
HP 8566B Spectr Analyzer	um 30	014A06947	05/02/2012	05/02/20	14	598
HP 85650A Quas	i 3	145A01673	05/02/2013	05/02/20	15	003
Peak Adapter						
EMCO 3810-2 L	ISN 4	576	05/17/2012	05/17/20	14	007
EMITest	\mathbf{V}^{2}	4.01 Build 195	05/01/2012	05/01/20	14	610
Measurement Software						
Equipment Und	er Test	(* = EUT):				
Function		Manufacturer	Model	#	S/N	
NFC Reader-Scar	n Card*	Socket Mobile	CF RF.	ID 6E2	N/A	
Support Devices	:					
Function		Manufacturer	Model		S/N	
PDA		Socket Mobile	SoMo		N/A	
AC Adapter		PI	P015W	/A0508	N/A	
Test Conditions		Connected to LISN				

SoMo 655 AC Adapter Connected to LISN EUT plugged into SoMo 655 EUT exercised via RFID Test Rev 1.2 FW:40b0

Transducer Legend:

T1=25' LMR #001

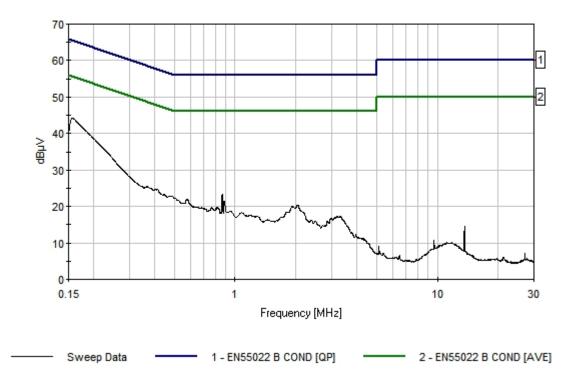
Ext Attn: 0 dB

T2=EMCO 3810-2 LISN S/N 9807-1988



Measurement Data:		Re	eading list	ted by ma	argin.		Test Lead: Line 1				
#	Freq MHz	Rdng dBµV	T1 dB	T2 dB	dB	dB	Dist Table	Corr dBµV	Spec dBµV	Margin dB	Polar Ant
1	156.545k	43.0	+0.0	+1.1			+0.0	44.1	65.6	-21.5	Line
2	863.383k	22.9	+0.0	+0.5			+0.0	23.4	56.0	-32.6	Line
3	877.000k	20.8	+0.0	+0.5			+0.0	21.3	56.0	-34.7	Line
4	2.021M	19.7	+0.0	+0.6			+0.0	20.3	56.0	-35.7	Line
5	3.288M	16.6	+0.0	+0.7			+0.0	17.3	56.0	-38.7	Line
6	13.606M	13.6	+0.0	+0.9			+0.0	14.5	60.0	-45.5	Line

EMCE Engineering Date: 4/8/2014 Time: 11:34:21 AM Socket Mobile, Inc. WO#: 4030 EN55022 B COND [QP] Test Lead: Line 1 120V 60Hz Sequence#: 1 Ext ATTN: 0 dB





FCC Part 15.207 Line Conducted Emissions 120V / 60 Hz - Line 2 150kHz – 30 MHz

Test Location: EMCE Engineering •44366 S. Grimmer Blvd • Fremont, CA 94538 •

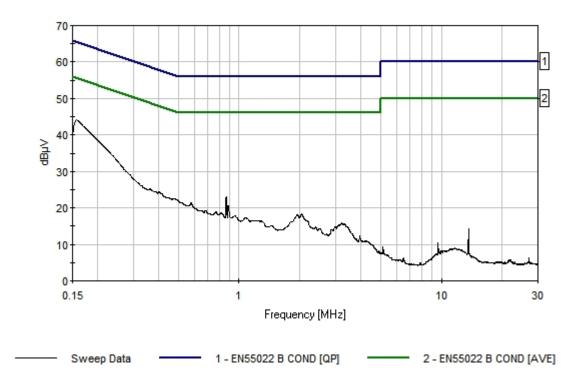
Customer: Specification: Work Order #: Test Type: Equipment: Manufacturer: Model: S/N:	Socket Mobile, Inc. EN55022 B COND [QP] 4030 Conducted Emissions NFC Reader-Scan Card Socket Mobile CF RFID 6E2 N/A		Date: Time: Sequence#: Tested By:	4/8/2014 11:40:44 AM 2 Bob Cole 120V 60Hz	Ι
Test Equipment					
Function	S/N	Calibration I			Asset #
HP 8566B Spectr	um 3014A06947	05/02/2012	05/02/20)14	598
Analyzer					
HP 85650A Quas	i 3145A01673	05/02/2013	05/02/20)15	003
Peak Adapter		05/17/0010	05/17/00	14	007
EMCO 3810-2 LI		05/17/2012	05/17/20		007
EMITest	v4.01 Build 195	05/01/2012	05/01/20)14	610
Measurement Software					
Soltwale					
	<i>er Test</i> (* = EUT):				
Function	Manufacturer		Model #	S/N	
NFC Reader-Scar	n Card* Socket Mobile	C	CF RFID 6E2	N/A	
Support Devices	:				
Function	Manufacturer	Ν	Model #	S/N	
PDA	Socket Mobile	S	SoMo 655	N/A	
AC Adapter	PI	Р	P015WA0508	N/A	
Test Conditions	/Notes:				
SoMo 655 AC Ac	lapter Connected to LISN				
EUT plugged into	o SoMo 655				
EUT exercised vi	a RFID Test Rev 1.2 FW:40)b0			
Transducer Leg					
T1=25' LMR #00	1	Т	Г2=EMCO 3810-2 I	LISN S/N 980	7-1988

Ext Attn: 0 dB



Measurement Data:		Re	eading lis	ted by ma	argin.		Test Lead: Line 2				
#	Freq	Rdng	T1	T2	5	15	Dist	Corr	Spec	Margin	Polar
	MHz	dBµV	dB	dB	dB	dB	Table	dBµV	dBµV	dB	Ant
1	156.545k	43.0	+0.0	+1.1			+0.0	44.1	65.6	-21.5	Line
2	862.656k	22.6	+0.0	+0.5			+0.0	23.1	56.0	-32.9	Line
3	877.000k	20.0	+0.0	+0.5			+0.0	20.5	56.0	-35.5	Line
4	2.034M	17.7	+0.0	+0.6			+0.0	18.3	56.0	-37.7	Line
5	3.199M	15.1	+0.0	+0.7			+0.0	15.8	56.0	-40.2	Line
6	13.615M	13.5	+0.0	+0.9			+0.0	14.4	60.0	-45.6	Line

EMCE Engineering Date: 4/8/2014 Time: 11:40:44 AM Socket Mobile, Inc. WO#: 4030 EN55022 B COND [QP] Test Lead: Line 2 120V 60Hz Sequence#: 2 Ext ATTN: 0 dB





5.3 Radiated Emission < 30MHz (9kHz - 30MHz, H-Field)

Requirement(s): 47 CFR §15.225 & RSS-210 (A2.6) & RSS-310 (3.7)

Procedures: For < 30MHz, Radiated emissions were measured according to ANSI C63.4. The EUT was set to transmit at the highest output power. The EUT was set 3 meter away from the measuring antenna. The loop antenna was positioned 1 meter above the ground from the centre of the loop. The measuring bandwidth was set to 10 kHz. (Note: During testing the receive antenna was rotated about its axis to maximize the emission from the EUT.)

The limit is converted from microvolt/meter to decibel microvolt/meter.

Sample Calculation: Corrected Amplitude = Raw Amplitude $(dB\mu V/m) + ACF (dB) + Cable Loss (dB) - Distance Correction Factor$

- 1. All possible modes of operation were investigated. Only the 6 worst case emissions measured, using the correct CISPR detectors, are reported. All other emissions were relatively insignificant.
- 2. A "-ve" margin indicates a PASS as it refers to the margin present below the limit line at the particular frequency.
- 3. Radiated Emissions Measurement Uncertainty All test measurements carried out are traceable to national standards. The uncertainty of the measurement at a confidence level of approximately 95% (in the case where distributions are normal), with a coverage factor of 2, is +/-6dB.

4.	Environmental Conditions	Temperature	24ºC
		Relative Humidity	45%
		Atmospheric Pressure	1010mbar

Test Date : 4/28/2014

Tested By : Bob Cole

Results: Pass



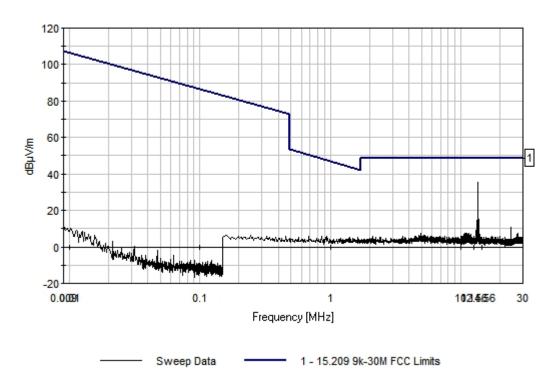
FCC Part 15.209 Radiated Emissions 9 kHz – 30 MHz

Test Location: EMCE Engineering •44366 S. Grimmer Blvd • Fremont, CA 94538 •

Custome Specific Work O Test Tyj Equipme Manufae Model: S/N:	ation: 1 rder #: 4 pe: F ent: N cturer: S	Gocket Cor 5.209 9k-3 030 Radiated S NFC Read Gocket Mob E2 V/A	30M FCC can er-Scan C	Lim	its	Date: 4/28/2014 Time: 1:37:04 PM Sequence#: 3 Tested By: Bob Cole					
	quipment:										
Function	n	S/N			Calibratio	n Date	Cal	Due Date	As	set #	
	nent Under		,								
Function			lanufactur			Model			S/N		
NFC Re	ader-Scan C	lard* S	ocket Mol	oile, I	nc.	CF RF	ID 6E2		N/A		
Suppor	rt Devices:										
Function	n	Ν	Ianufactur	er		Model	#		S/N		
Test Co	onditions / N	lotes:									
1057 00	manions / 1	0105.									
	, <u>,</u>	1									
	lucer Legend LMR #001	<i>a</i> :									
	Attn: 0 dB	Л	1. 1. 1. 4	. 1 1			т	. D'	2 14		
#	ement Data:		eading list T1	ea by	margin.		Dist	Corr	e: 3 Meters		Polar
#	Freq MHz	Rdng dBµV	dB	dB	dB	dB	Table		Spec dBµV/m	Margin dB	Ant
1	13.555M	<u>45.7</u>	+0.0	uD	uD	uD	-10.0	<u>α</u> βμ γ/III 35.7	48.6	-12.9	Vert
1	13.33311	43.7	± 0.0				-10.0	55.7	40.0	-12.9	VEIL
2	13.654M	27.3	+0.0				-10.0	17.3	48.6	-31.3	Vert
2	15.05 101	21.5	10.0				10.0	17.5	10.0	51.5	vert
3	13.447M	26.1	+0.0				-10.0	16.1	48.6	-32.5	Vert
-											
4	13.762M	25.4	+0.0				-10.0	15.4	48.6	-33.2	Vert
5	13.420M	24.8	+0.0				-10.0	14.8	48.6	-33.8	Vert
6	13.483M	24.4	+0.0				-10.0	14.4	48.6	-34.2	Vert
1											



EMCE Engineering Date: 4/28/2014 Time: 1:37:04 PM Socket Communications WO#: 4030 15.209 9k-30M FCC Limits Test Distance: 3 Meters Sequence#: 3 Ext ATTN: 0 dB



Page 16 of 26



5.4 Radiated Emissions > 30 MHz (30MHz – 1 GHz, E-Field)

Requirement(s): 47 CFR §15.209; 47 CFR §15.225(d) & RSS-210 (A2.6)

Procedures: For > 30MHz, Radiated emissions were measured according to ANSI C63.4. The EUT was set to transmit at the highest output power. The EUT was set 10 meter away from the measuring antenna. The Log periodic antenna was positioned 1 meter above the ground from the centre of the antenna. The measuring bandwidth was set to 120 kHz. (Note: During testing the receive antenna was raise from 1~4 meters to maximize the emission from the EUT.)

The limit is converted from microvolt/meter to decibel microvolt/meter.

Sample Calculation: Corrected Amplitude = Raw Amplitude $(dB\mu V/m) + ACF (dB) + Cable Loss(dB) - Distance Correction Factor$

- 1. All possible modes of operation were investigated. Only the 6 worst case emissions measured, using the correct CISPR detectors, are reported. All other emissions were relatively insignificant.
- 2. A "-ve" margin indicates a PASS as it refers to the margin present below the limit line at the particular frequency.
- 3. Radiated Emissions Measurement Uncertainty All test measurements carried out are traceable to national standards. The uncertainty of the measurement at a confidence level of approximately 95% (in the case where distributions are normal), with a coverage factor of 2, is +/-6dB.
- 4. Environmental Conditions Temperature 24°C Relative Humidity 45% Atmospheric Pressure 1010mbar

Test Date : 4/15/2014

Tested By : Bob Cole

Results: Pass



FCC ID: LUBCF6V2, IC:2529A-CF6V2 Test Report # 4030-1 FCC Part 15B Radiated Emissions 30 MHz – 1 GHz

Test Location: EMCE Engineering •44366 S. Grimmer Blvd • Fremont, CA 94538 •

Customer: Specification: Work Order #: Test Type: Equipment: Manufacturer: Model: S/N:	Socket Mobile, Inc. EN55022B RADIATED 4030 Maximized Emissions NFC Reader-Scan Card Socket Mobile CF RFID 6E2 N/A		Date: 4/15/2014 Time: 12:06:22 Sequence#: 4 Tested By: Bob Cole	
Test Equipment				A
Function	S/N	Calibration Date	Cal Due Date	Asset #
HP 8593EM	3497A5703	05/17/2012	05/17/2014	609
HP 8447D PreAr	*	05/01/2013	05/01/2015	008
Sunol Sciences J	B6 1090	08/14/2012	08/14/2014	701
Antenna				
EMITest	v4.01 Build 195	05/01/2012	05/01/2014	610
Measurement				
Software				
Equipment Und	<i>ler Test</i> (* = EUT):			
Function	Manufacturer	Model	# S/I	N
NFC Reader-Sca	n Card* Socket Mobile	CF RF	TID 6E2 N/	A
Support Devices	s:			
Function	Manufacturer	Model	# S/I	N
PDA	Socket Mobile	SoMo		
AC Adapter	PI	P015W	VA0508 N/	A
Test Conditions	/ Notes:			
EUT Emissions N	Maximized OATS 10 Meter	S		
EUT plugged int				
	ia RFID Test Rev 1.2 FW:40)b0		
Transducer Leg	end:			
	1 055	TA G		

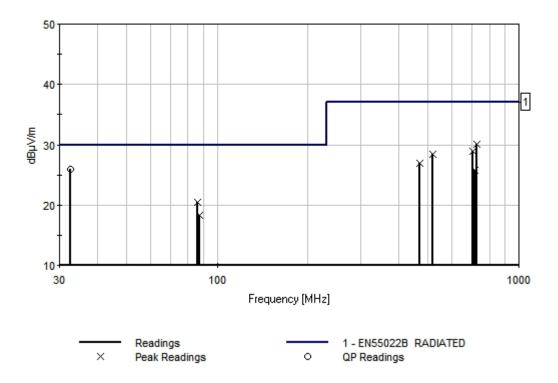
T1=8447 Pre-Amp Asset 377 T3=100' LMR 900 Rad Cable 12-2013 T2=Sunol JB6 S/N A42610

Ext Attn: 0 dB



Measur	rement Data:	Re	eading lis	ding listed by margin. Test Distance: 10 Meters							
#	Freq	Rdng	T1	T2	T3		Dist	Corr	Spec	Margin	Polar
	MHz	dBµV	dB	dB	dB	dB	Table	$dB\mu V/m$	$dB\mu V/m$	dB	Ant
1	32.596M	33.7	+27.0	+19.1	+0.1		+0.0	25.9	30.0	-4.1	Vert
	QP						219				177
2	727.969M	35.2	+27.1	+20.6	+1.4		+0.0	30.1	37.0	-6.9	Horiz
							180				141
4	519.986M	36.2	+26.9	+18.1	+1.0		+0.0	28.4	37.0	-8.6	Horiz
							55				206
5	85.800M	40.1	+27.0	+7.5	-0.1		+0.0	20.5	30.0	-9.5	Vert
							125				100
6	467.976M	35.8	+26.9	+17.3	+0.8		+0.0	27.0	37.0	-10.0	Horiz
							72				161
7	714.977M	31.0	+27.1	+20.4	+1.4		+0.0	25.7	37.0	-11.3	Horiz
							2				144
8	87.320M	37.7	+26.9	+7.6	-0.1		+0.0	18.3	30.0	-11.7	Vert
							170				100

EMCE Engineering Date: 4/15/2014 Time: 12:06:22 Socket Mobile, Inc. WO#: 4030 EN55022B RADIATED Test Distance: 10 Meters Sequence#: 4 Ext ATTN: 0 dB



Page 19 of 26



5.5 Frequency Stability

Requirement(s): 47 CFR §15.225(e) & RSS-210 (A2.6)

Procedures: Frequency Stability was measured according to 47 CFR §2.1055. Measurement was taken with spectrum analyzer. The spectrum analyzer bandwidth and span was set to read in hertz. A voltmeter was used to monitor when varying the voltage.

Limit: ±0.01% of 13.5589 MHz = 1355 Hz

Environmental Conditions	Temperature	23°C
	Relative Humidity	45%
	Atmospheric Pressure	1010mbar

Test Date : 4/21/2014

Tested By : Bob Cole

Results: Pass

Frequency Stability versus Temperature: The Frequency tolerance of the carrier signal shall be maintained within $\pm 0.01\%$ of the operating frequency over a temperature variation of -20°C to +50°C at normal supply voltage.

Reference Frequency: 13.5589 MHz at -20°C and +50°C

Temperature (ºC)	Measured Freq. (MHz)	Freq. Drift (Hz)	Freq. Deviation (Limit: 0.01%)	Pass/Fail			
50	13.55904	96	<0.01	Pass			
40	13.55913	87	<0.01	Pass			
30	13.55911	89	<0.01	Pass			
20		Reference (13.56 MHz)					
10	13.55962	38	<0.01	Pass			
0	13.55922	78	<0.01	Pass			
-10	13.55945	55	<0.01	Pass			
-20	13.55946	54	<0.01	Pass			



Frequency Stability versus Input Voltage: The Frequency tolerance of the carrier signal shall be maintained within \pm 0.01%, the frequency of the transmitter was measured at 85% and at 115% of the rated power supply voltage at 20°C environmental temperature.

Carrier Frequency: 13.5589 MHz at 20°C at 5VDC

Measured Voltage ±15% of nominal (DC)	Measured Freq. (MHz)	Freq. Drift (Hz)	Freq. Deviation (Limit: 0.01%)	Pass/Fail
4.25	13.55982	18	<0.01	Pass
5.75	13.55977	23	<0.01	Pass



5.6 Fundamental Field Strength Test Result

- 1. All possible modes of operation were investigated. Only the 6 worst case emissions measured, using the correct CISPR detectors, are reported. All other emissions were relatively insignificant.
- 2. A "-ve" margin indicates a PASS as it refers to the margin present below the limit line at the particular frequency.
- 3. Radiated Emissions Measurement Uncertainty All test measurements carried out are traceable to national standards. The uncertainty of the measurement at a confidence level of approximately 95% (in the case where distributions are normal), with a coverage factor of 2, is +/-6dB.
- 4. Environmental Conditions T
 - Temperature Relative Humidity Atmospheric Pressure

23°C 46% 1010mbar

Test Date : 4/25/2014

Tested By : Bob Cole

Test Requirement:

13.56MHz

- (a) The field strength of any emissions within the band 13.553–13.567 MHz shall not exceed 15,848 microvolts/meter at 30 meters.
- (b) Within the bands 13.410–13.553 MHz and 13.567–13.710 MHz, the field strength of any emissions shall not exceed 334 microvolts/meter at 30 meters.
- (c) Within the bands 13.110–13.410 MHz and 13.710–14.010 MHz the field strength of any emissions shall not exceed 106 microvolts/meter at 30 meters.



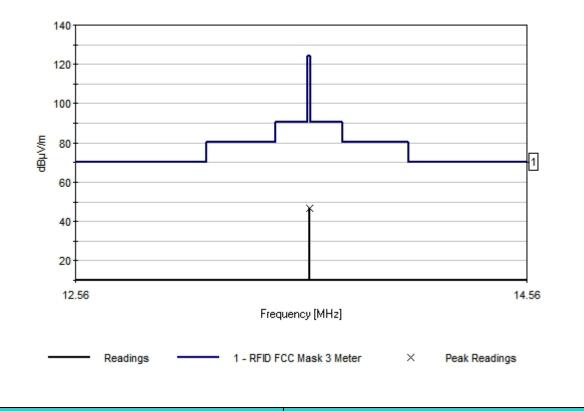
Peak Output Power Per CFR 47, Section 15.225 and RSS-210 Issue 8 A2.6

Test Location: EMCE Engineering •44366 S. Grimmer Blvd • Fremont, CA 94538 •

Custome Specific Work O Test Typ Equipme Manufac Model: S/N:	ation: I rder #: 4 pe: I ent: I cturer: S	Socket Communications RFID FCC Mask 3 Meter 4030 Radiated Scan NFC Reader-Scan Card Socket Mobile, Inc. CF RFID 6E2 N/A				Date: 4/25/2014 Time: 11:18:49 Sequence#: 1 Tested By: Bob Cole					
	uipment:										
Function	ı	S/N		C	alibration	n Date	Cal	Due Date	A	Asset #	
Equipn	nent Under	<i>Test</i> (* =	EUT):								
Function			Manufactur	er		Model #	ŧ		S/N		
NFC Re	ader-Scan (Card*	Socket Moł	oile, Inc.		CF RFI	D 6E2		N/A		
Suppor	t Devices:										
Function			Manufactur	er		Model #	ŧ		S/N		
PDA		1	Socket Moł	oile		SoMo 6	555		N/A		
Test Co	onditions / N	Notes:									
1051 00	111110115 / 1	10105.									
T 1	τ	1									
	<i>ucer Legen</i> LMR #001	<i>a</i> :				T2_011	7 Dec A	man Assat 2	77		
	105 Loop A	ntanna				12=044	/ Pre-A	mp Asset 3	//		
	^										
	Ext Attn: 0 dBTest Distance: 3 MetersMeasurement Data:Reading listed by margin.										
#	Freq	Rdng	T1	T2	T3		Dist	Corr	Spec	Margin	Polar
"	MHz	dBµV	dB	dB	dB	dB	Table			U	Ant
1	13.560M	<u>54.2</u>	+0.0	+27.3	+19.6	u.D	+0.0	46.5	124.0	-77.5	Paral
	10.00000	0 1.2	10.0	. 27.0	122.0		10.0	10.0	120	, ,	



EMCE Engineering Date: 4/25/2014 Time: 11:18:49 Socket Communications WO#: 4030 RFID FCC Mask 3 Meter Test Distance: 3 Meters Sequence#: 1 Ext ATTN: 0 dB



Frequency (MHz)	Corrected Amplitude Reading (dBuV/m @ 3M)
13.5602	46.5



5.7 Occupied Bandwidth

Requirement(s): RSS-210 (5.9.1)

Procedures: Occupied Bandwidth was measured according to RSS-210 (5.9.1). Measurement was taken with spectrum analyzer. The spectrum analyzer bandwidth and span was set to read in hertz.

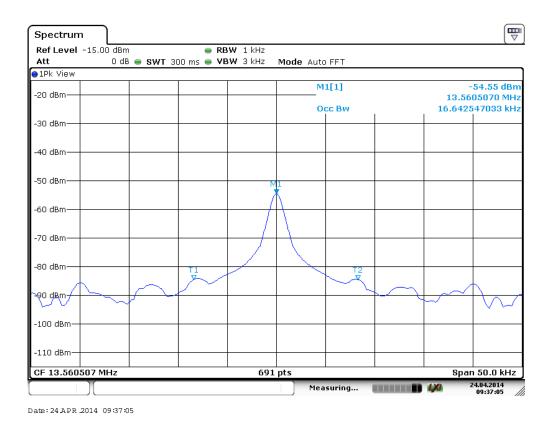
Environmental Conditions	Temperature	24°C
	Relative Humidity	45%
	Atmospheric Pressure	1010mbar

Test Date : 4/24/2014

Tested By : Bob Cole

Results: Pass

Frequency	Occupied Bandwidth (99%)
13.5589 MHz	16.64 KHz



Page 25 of 26



6.0 TEST EQUIPMENT

DESCRIPTION & MANUFACTURER	MODEL NO.	SERIAL NO.	CAL. DATE	CAL. DUE DATE
Spectrum Analyzer Hewlett-Packard	8566B	3014A06947	5/2/12	5/2/14
Quasi-Peak Adapter Hewlett-Packard	85650A	3145A01673	5/2/13	5/2/15
EMI Analyzer System Hewlett-Packard	8593EM	3497A5703	5/17/12	5/17/14
Signal Analyzer Rohde-Schwarz	FSV7	1321.3008K7	3/10/14	3/10/16
HP 84125 EMI Measurement System	84125B	US36432003	5/1 /13	5/1/15
Pre-Amplifier(100KHz-1.3GHz) Hewlett-Packard	8447D	2443A03587	5/1/13	5/1/15
LISN(9KHz-30MHz) EMCO	3810-2	9807-1988	5/17/12	5/17/14
LISN(9KHz-30MHz) EMCO	3810-2	4576	5/17/12	5/17/14
BiConiLog Antenna Sunol Sciences	JB6	1090	8/14/12	8/14/14
Loop Antenna Eppire Devices	LP105	000114	1/15/14	1/15/16
Webber Temperature Chamber	WE4-100- 200	3-60-32	8/15/13	8/15/15
RF Signal Cable Murata	25' LMR	N/A	5/10 /13	5/10 /15
RF Signal Cable EMCE	100' LMR	N/A	5/1 /13	5/1 /15