

Identive Group, Inc.

ADDENDUM TO TEST REPORT 91345-11

**TouchSecure Reader, 8800
TouchSecure Reader / Programmer, 8805**

Tested To The Following Standards:

**FCC Part 15 Subpart C Section 15.207 & 15.225
&
RSS-210 Issue 8**

Report No.: 91345-11A

Date of issue: September 18, 2012



This test report bears the accreditation symbol indicating that the testing performed herein meets the test and reporting requirements of ISO/IEC 17025 under the applicable scope of EMC testing for CKC Laboratories, Inc.

We strive to create long-term, trust based relationships by providing sound, adaptive, customer first testing services. We embrace each of our customers' unique EMC challenges, not as an interruption to set processes, but rather as the reason we are in business.

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ADMINISTRATIVE INFORMATION

Test Report Information

REPORT PREPARED FOR:

Identive Group, Inc.
1900-B Carnegie Avenue
Santa Ana, CA 92705

Representative: Jason Hart

DATE OF EQUIPMENT RECEIPT:**DATE(S) OF TESTING:****REPORT PREPARED BY:**

Dianne Dudley
CKC Laboratories, Inc.
5046 Sierra Pines Drive
Mariposa, CA 95338

Project Number: 93564

September 15, 2011

September 15, 2011 to January 4, 2012

Revision History

Original: Testing of the TouchSecure Reader, 8800 and the TouchSecure Reader / Programmer, 8805 to FCC Part 15 Subpart C Sections 15.207 & 15.225 and RSS 210 Issue 8.

Addendum A: To change the company name and address from idOnDemand, 6800 Koll Center Parkway Pleasanton, CA 94566 to Identive Group, Inc. 1900-B Carnegie Avenue Santa Ana, CA 92705.

Report Authorization

The test data contained in this report documents the observed testing parameters pertaining to and are relevant for only the sample equipment tested in the agreed upon operational mode(s) and configuration(s) as identified herein. Compliance assessment remains the client's responsibility. This report may not be used to claim product endorsement by A2LA or any government agencies. This test report has been authorized for release under quality control from CKC Laboratories, Inc.



Steve Behm
Director of Quality Assurance & Engineering Services
CKC Laboratories, Inc.

Test Facility Information



Our laboratories are configured to effectively test a wide variety of product types. CKC utilizes first class test equipment, anechoic chambers, data acquisition and information services to create accurate, repeatable and affordable test results.

TEST LOCATION(S):
CKC Laboratories, Inc.
1120 Fulton Place
Fremont, CA 94539

Site Registration & Accreditation Information

Location	CB #	JAPAN	CANADA	FCC
Fremont	US0082	R-2160, C-2332, T-228 & G-522	3082B-1	958979

SUMMARY OF RESULTS

Standard / Specification: FCC Part 15 Subpart C 15.207, 15.225 & RSS-210 Issue 8

Description	Test Procedure/Method	Results
Conducted Emissions	FCC Part 15 Subpart C Section 15.207 / ANSI C63.4 (2003)	Pass
RF Power Output	FCC Part 15 Subpart C Section 15.225(a)	Pass
-20dBc Occupied Bandwidth & Emissions Mask	FCC Part 15 Subpart C Section 2.1049	Pass
Field Strength of Spurious Emissions	FCC Part 15 Subpart C Section 15.225(d)	Pass
Frequency Stability	FCC Part 15 Subpart C Section 15.225(e)	Pass
99% Bandwidth	RSS-210	Pass

Conditions During Testing

This list is a summary of the conditions noted for or modifications made to the equipment during testing.

Summary of Conditions
None

EQUIPMENT UNDER TEST (EUT)

EQUIPMENT UNDER TEST

TouchSecure Reader

Manuf: idOnDemand
Model: 8800
Serial: None

TouchSecure Reader / Programmer

Manuf: idOnDemand
Model: 8805
Serial: None

PERIPHERAL DEVICES

The EUT was tested with the following peripheral device(s):

DC Power Supply

Manuf: Protek
Model: 3006B
Serial: AN:03088, SN:AG4070

Wiegand Control Box

Manuf: HID
Model: 83000BKE
Serial: None

DMM

Manuf: Fluke
Model: DMM914
Serial: DMM914TW141024

Laptop

Manuf: Dell
Model: Latitude E6320
Serial: None

Power Adapter

Manuf: Dell
Model: FA90PM111
Serial: None

FCC PART 15 SUBPART C

This report contains EMC emissions test results under United States Federal Communications Commission (FCC) 47 CFR 15C requirements for Unlicensed Radio Frequency Devices, Subpart C - Intentional Radiators.

FCC 15.207 AC Conducted Emissions

Test Data Sheets

Test Location: CKC Laboratories, Inc. • 1120 Fulton Place. • Fremont, CA 94539 • (510) 249-1170

Customer: **idOnDemand**

Specification: **15.207 AC Mains - Average**

Work Order #: **91345**

Test Type: **Conducted Emissions**

Equipment: **TouchSecure Reader**

Manufacturer: idOnDemand

Model: 8800

S/N: None

Date: 1/4/2012

Time: 09:18:43

Sequence#: 27

Tested By: A Brar

120V 60Hz

Test Equipment:

ID	Asset #	Description	Model	Calibration Date	Cal Due Date
	AN02660	Spectrum Analyzer	E4446A	11/3/2011	11/3/2013
T1	ANP01211	Attenuator	23-10-34	4/15/2011	4/15/2013
T2	ANP05258	High Pass Filter	HE9615-150K-50-720B	12/2/2010	12/2/2012
T3	ANP05300	Cable	RG214/U	3/7/2011	3/7/2013
T4	ANP05440	Cable		3/7/2011	3/7/2013
T5	AN00493	50uH LISN-L1 (L) Loss W/O European Adapter	3816/NM	3/10/2011	3/10/2013
	AN00493	50uH LISN-L(2) N Loss W/O European Adapter	3816/NM	3/10/2011	3/10/2013

Equipment Under Test (* = EUT):

Function	Manufacturer	Model #	S/N
TouchSecure Reader*	idOnDemand	8800	None

Support Devices:

Function	Manufacturer	Model #	S/N
DC Power Supply	Protek	3006B	AN:03088, SN:AG4070

Test Conditions / Notes:

Conducted Emissions. 0.15-30MHz. Highest generated frequency in the device is 48MHz.
 Temperature: 18°C, Atmospheric Pressure: 1022mbar & Relative Humidity: 35%
 Transmit Frequency: 13.56MHz Modulated & 125kHz Modulated. The EUT is powered by the DC Power Supply.
 Conducted emissions are being performed on AC input of the DC Power supply.
 The EUT initially was over the spec limit at the fundamental frequency. Once the antenna output was terminated with a 50Ω load, the fundamental was well below the spec limit. Therefore, the EUT is considered compliant.

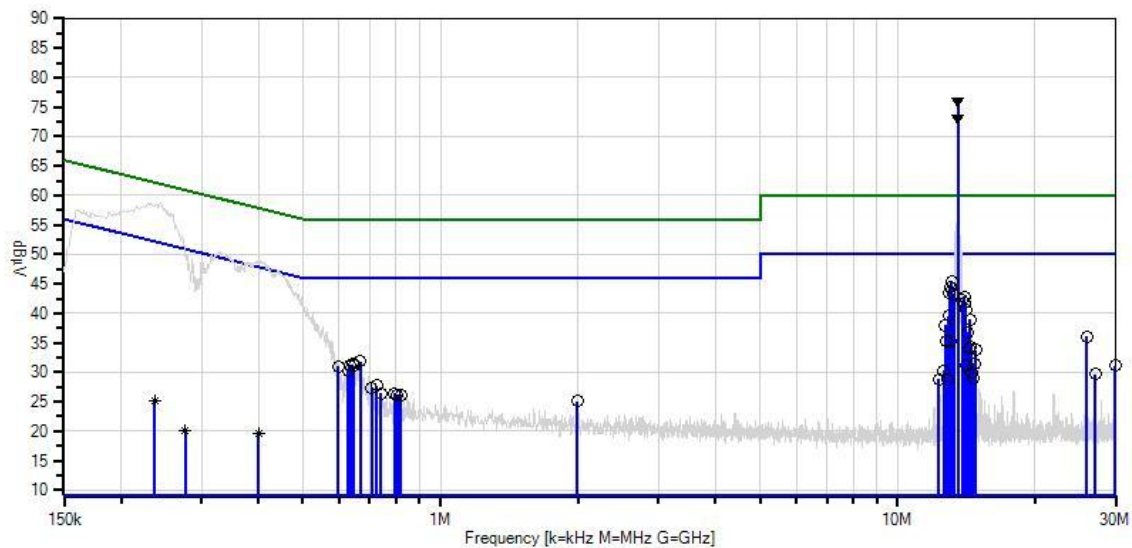
Ext Attn: 0 dB

Measurement Data:			Reading listed by margin.					Test Lead: Black			
#	Freq	Rdng	T1 T5	T2	T3	T4	Dist	Corr	Spec	Margin	Polar
	MHz	dBμV	dB	dB	dB	dB	Table	dBμV	dBμV	dB	Ant
1	13.560M Ambient	65.2	+9.8 +0.5	+0.1	+0.1	+0.2	+0.0	75.9	50.0	+25.9	Black
2	13.562M Ambient	65.2	+9.8 +0.5	+0.1	+0.1	+0.2	+0.0	75.9	50.0	+25.9	Black
3	13.560M Ambient	62.5	+9.8 +0.5	+0.1	+0.1	+0.2	+0.0	73.2	50.0	+23.2	Black
4	13.139M	34.6	+9.8 +0.5	+0.1	+0.1	+0.2	+0.0	45.3	50.0	-4.7	Black
5	13.058M	33.8	+9.8 +0.5	+0.1	+0.1	+0.2	+0.0	44.5	50.0	-5.5	Black
6	13.004M	32.8	+9.8 +0.5	+0.1	+0.1	+0.2	+0.0	43.5	50.0	-6.5	Black
7	13.274M	32.6	+9.8 +0.5	+0.1	+0.1	+0.2	+0.0	43.3	50.0	-6.7	Black
8	13.986M	32.0	+9.8 +0.5	+0.1	+0.1	+0.2	+0.0	42.7	50.0	-7.3	Black
9	13.851M	31.5	+9.8 +0.5	+0.1	+0.1	+0.2	+0.0	42.2	50.0	-7.8	Black
10	14.067M	31.1	+9.8 +0.5	+0.1	+0.1	+0.2	+0.0	41.8	50.0	-8.2	Black
11	14.121M	29.9	+9.8 +0.5	+0.1	+0.1	+0.2	+0.0	40.6	50.0	-9.4	Black
12	12.923M	28.8	+9.9 +0.5	+0.1	+0.1	+0.2	+0.0	39.6	50.0	-10.4	Black
13	14.409M	28.3	+9.8 +0.5	+0.1	+0.1	+0.2	+0.0	39.0	50.0	-11.0	Black
14	12.716M	27.2	+9.9 +0.5	+0.1	+0.1	+0.2	+0.0	38.0	50.0	-12.0	Black
15	14.193M	26.1	+9.8 +0.5	+0.1	+0.1	+0.2	+0.0	36.8	50.0	-13.2	Black
16	25.957M	24.7	+9.9 +0.7	+0.3	+0.1	+0.3	+0.0	36.0	50.0	-14.0	Black
17	668.498k	21.2	+9.9 +0.5	+0.2	+0.0	+0.0	+0.0	31.8	46.0	-14.2	Black
18	642.318k	20.8	+9.9 +0.5	+0.2	+0.0	+0.0	+0.0	31.4	46.0	-14.6	Black
19	12.788M	24.4	+9.9 +0.5	+0.1	+0.1	+0.2	+0.0	35.2	50.0	-14.8	Black

20	13.094M	24.5	+9.8 +0.5	+0.1	+0.1	+0.2	+0.0	35.2	50.0	-14.8	Black
21	632.138k	20.5	+9.9 +0.5	+0.2	+0.0	+0.0	+0.0	31.1	46.0	-14.9	Black
22	645.954k	20.5	+9.9 +0.5	+0.2	+0.0	+0.0	+0.0	31.1	46.0	-14.9	Black
23	597.232k	20.4	+9.9 +0.5	+0.2	+0.0	+0.0	+0.0	31.0	46.0	-15.0	Black
24	627.047k	19.7	+9.9 +0.5	+0.2	+0.0	+0.0	+0.0	30.3	46.0	-15.7	Black
25	14.490M	23.5	+9.8 +0.5	+0.1	+0.1	+0.2	+0.0	34.2	50.0	-15.8	Black
26	14.328M	23.4	+9.8 +0.5	+0.1	+0.1	+0.2	+0.0	34.1	50.0	-15.9	Black
27	14.833M	23.1	+9.8 +0.5	+0.1	+0.1	+0.2	+0.0	33.8	50.0	-16.2	Black
28	725.947k	17.1	+9.9 +0.5	+0.2	+0.0	+0.0	+0.0	27.7	46.0	-18.3	Black
29	14.752M	20.8	+9.8 +0.5	+0.1	+0.1	+0.2	+0.0	31.5	50.0	-18.5	Black
30	707.040k	16.8	+9.9 +0.5	+0.2	+0.0	+0.0	+0.0	27.4	46.0	-18.6	Black
31	14.139M	20.4	+9.8 +0.5	+0.1	+0.1	+0.2	+0.0	31.1	50.0	-18.9	Black
32	29.952M	19.6	+10.0 +0.8	+0.3	+0.1	+0.3	+0.0	31.1	50.0	-18.9	Black
33	739.764k	15.8	+9.9 +0.5	+0.2	+0.0	+0.0	+0.0	26.4	46.0	-19.6	Black
34	792.123k	15.9	+9.8 +0.5	+0.2	+0.0	+0.0	+0.0	26.4	46.0	-19.6	Black
35	12.634M	19.6	+9.9 +0.4	+0.1	+0.1	+0.2	+0.0	30.3	50.0	-19.7	Black
36	803.031k	15.7	+9.8 +0.5	+0.2	+0.0	+0.0	+0.0	26.2	46.0	-19.8	Black
37	819.030k	15.7	+9.8 +0.5	+0.2	+0.0	+0.0	+0.0	26.2	46.0	-19.8	Black
38	14.535M	19.3	+9.8 +0.5	+0.1	+0.1	+0.2	+0.0	30.0	50.0	-20.0	Black
39	27.122M	18.5	+9.9 +0.7	+0.2	+0.1	+0.3	+0.0	29.7	50.0	-20.3	Black
40	1.996M	14.7	+9.8 +0.4	+0.1	+0.0	+0.1	+0.0	25.1	46.0	-20.9	Black
41	14.697M	18.3	+9.8 +0.5	+0.1	+0.1	+0.2	+0.0	29.0	50.0	-21.0	Black
42	12.292M	18.1	+9.9 +0.4	+0.1	+0.1	+0.2	+0.0	28.8	50.0	-21.2	Black
43	12.842M	17.9	+9.9 +0.5	+0.1	+0.1	+0.2	+0.0	28.7	50.0	-21.3	Black
44	237.074k	13.9	+9.9 +1.3	+0.1	+0.0	+0.0	+0.0	25.2	52.2	-27.0	Black
Ave											
^	237.074k	47.5	+9.9 +1.3	+0.1	+0.0	+0.0	+0.0	58.8	52.2	+6.6	Black

46	400.126k	9.0	+9.8	+0.1	+0.0	+0.0	+0.0	19.7	47.9	-28.2	Black
	Ave		+0.8								
^	400.126k	38.4	+9.8	+0.1	+0.0	+0.0	+0.0	49.1	47.9	+1.2	Black
			+0.8								
48	276.583k	9.1	+9.8	+0.1	+0.0	+0.0	+0.0	20.1	50.9	-30.8	Black
	Ave		+1.1								
^	276.583k	38.4	+9.8	+0.1	+0.0	+0.0	+0.0	49.4	50.9	-1.5	Black
			+1.1								

CKC Laboratories, Inc. Date: 1/4/2012 Time: 09:18:43 idOnDemand WO#: 91345 Model: 8800 SN: None
15.207 AC Mains - Average Test Lead: Black 120V 60Hz Sequence#: 27 Ext ATTN: 0 dB



— Sweep Data
○ Peak Readings
* Average Readings
— 1 - 15.207 AC Mains - Average
— Readings
× QP Readings
▼ Ambient
— 2 - 15.207 AC Mains - Quasi-peak

Test Location: CKC Laboratories, Inc. • 1120 Fulton Place. • Fremont, CA 94539 • (510) 249-1170

Customer: **idOnDemand**
 Specification: **15.207 AC Mains - Average**
 Work Order #: **91345**
 Test Type: **Conducted Emissions**
 Equipment: **TouchSecure Reader**
 Manufacturer: **idOnDemand**
 Model: **8800**
 S/N: **None**

Date: 1/4/2012
 Time: 09:23:08
 Sequence#: 28
 Tested By: A Brar
 120V 60Hz

Test Equipment:

ID	Asset #	Description	Model	Calibration Date	Cal Due Date
	AN02660	Spectrum Analyzer	E4446A	11/3/2011	11/3/2013
T1	ANP01211	Attenuator	23-10-34	4/15/2011	4/15/2013
T2	ANP05258	High Pass Filter	HE9615-150K-50-720B	12/2/2010	12/2/2012
T3	ANP05300	Cable	RG214/U	3/7/2011	3/7/2013
T4	ANP05440	Cable		3/7/2011	3/7/2013
	AN00493	50uH LISN-L1 (L) Loss W/O European Adapter	3816/NM	3/10/2011	3/10/2013
T5	AN00493	50uH LISN-L(2) N Loss W/O European Adapter	3816/NM	3/10/2011	3/10/2013

Equipment Under Test (* = EUT):

Function	Manufacturer	Model #	S/N
TouchSecure Reader*	idOnDemand	8800	None

Support Devices:

Function	Manufacturer	Model #	S/N
DC Power Supply	Protek	3006B	AN:03088, SN:AG4070

Test Conditions / Notes:

Conducted Emissions. 0.15-30MHz. Highest generated frequency in the device is 48MHz.
 Temperature: 18°C, Atmospheric Pressure: 1022mbar & Relative Humidity: 35%
 Transmit Frequency: 13.56MHz Modulated & 125kHz Modulated. The EUT is powered by the DC Power Supply.
 Conducted emissions are being performed on AC input of the DC Power supply.
 The EUT initially was over the spec limit at the fundamental frequency. Once the antenna output was terminated with a 50Ω load, the fundamental was well below the spec limit. Therefore, the EUT is considered compliant.

Ext Attn: 0 dB

Measurement Data:

Reading listed by margin.

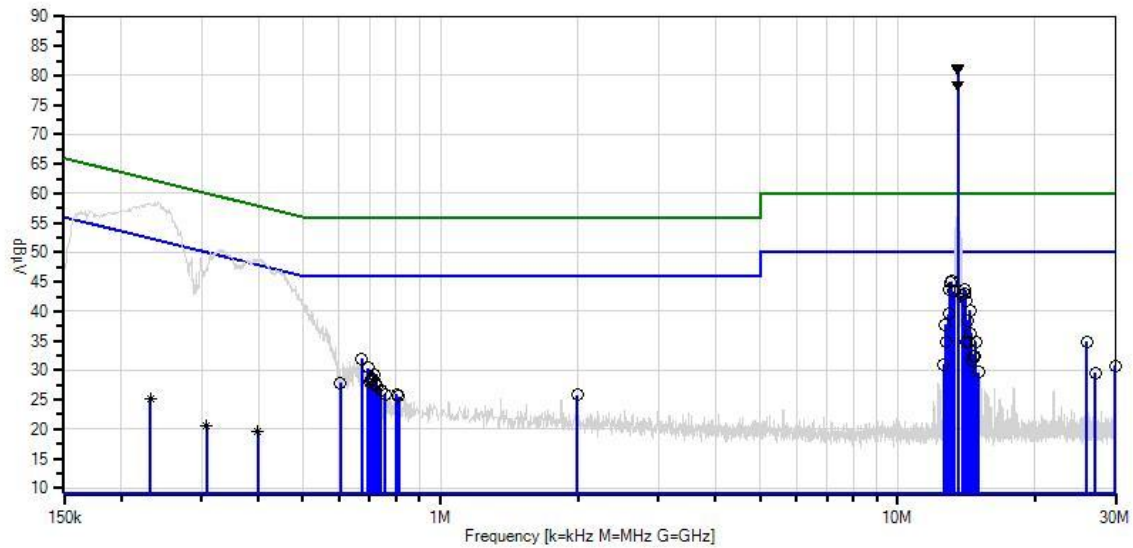
Test Lead: White

#	Freq	Rdng	T1 T5	T2	T3	T4	Dist	Corr	Spec	Margin	Polar
	MHz	dBμV	dB	dB	dB	dB	Table	dBμV	dBμV	dB	Ant
1	13.560M Ambient	70.6	+9.8 +0.5	+0.1	+0.1	+0.2	+0.0	81.3	50.0 Fundamental. Peak.	+31.3	White
2	13.560M Ambient	70.5	+9.8 +0.5	+0.1	+0.1	+0.2	+0.0	81.2	50.0 Fundamental. QP.	+31.2	White
3	13.560M Ambient	67.8	+9.8 +0.5	+0.1	+0.1	+0.2	+0.0	78.5	50.0 Fundamental. Average.	+28.5	White

4	13.139M	34.4	+9.8 +0.5	+0.1	+0.1	+0.2	+0.0	45.1	50.0	-4.9	White
5	13.058M	34.3	+9.8 +0.5	+0.1	+0.1	+0.2	+0.0	45.0	50.0	-5.0	White
6	13.986M	33.1	+9.8 +0.5	+0.1	+0.1	+0.2	+0.0	43.8	50.0	-6.2	White
7	13.004M	33.0	+9.8 +0.5	+0.1	+0.1	+0.2	+0.0	43.7	50.0	-6.3	White
8	13.274M	32.7	+9.8 +0.5	+0.1	+0.1	+0.2	+0.0	43.4	50.0	-6.6	White
9	14.058M	32.3	+9.8 +0.5	+0.1	+0.1	+0.2	+0.0	43.0	50.0	-7.0	White
10	13.851M	32.0	+9.8 +0.5	+0.1	+0.1	+0.2	+0.0	42.7	50.0	-7.3	White
11	14.121M	31.0	+9.8 +0.5	+0.1	+0.1	+0.2	+0.0	41.7	50.0	-8.3	White
12	14.409M	29.5	+9.8 +0.5	+0.1	+0.1	+0.2	+0.0	40.2	50.0	-9.8	White
13	12.923M	28.7	+9.9 +0.5	+0.1	+0.1	+0.2	+0.0	39.5	50.0	-10.5	White
14	14.193M	27.8	+9.8 +0.5	+0.1	+0.1	+0.2	+0.0	38.5	50.0	-11.5	White
15	12.706M	27.0	+9.9 +0.5	+0.1	+0.1	+0.2	+0.0	37.8	50.0	-12.2	White
16	14.490M	25.6	+9.8 +0.5	+0.1	+0.1	+0.2	+0.0	36.3	50.0	-13.7	White
17	673.587k	21.4	+9.9 +0.5	+0.2	+0.0	+0.0	+0.0	32.0	46.0	-14.0	White
18	25.957M	23.6	+9.9 +0.7	+0.3	+0.1	+0.3	+0.0	34.9	50.0	-15.1	White
19	14.139M	24.1	+9.8 +0.5	+0.1	+0.1	+0.2	+0.0	34.8	50.0	-15.2	White
20	14.328M	24.1	+9.8 +0.5	+0.1	+0.1	+0.2	+0.0	34.8	50.0	-15.2	White
21	14.833M	24.1	+9.8 +0.5	+0.1	+0.1	+0.2	+0.0	34.8	50.0	-15.2	White
22	12.788M	23.9	+9.9 +0.5	+0.1	+0.1	+0.2	+0.0	34.7	50.0	-15.3	White
23	693.222k	19.8	+9.9 +0.5	+0.2	+0.0	+0.0	+0.0	30.4	46.0	-15.6	White
24	715.038k	18.7	+9.9 +0.5	+0.2	+0.0	+0.0	+0.0	29.3	46.0	-16.7	White
25	712.856k	17.9	+9.9 +0.5	+0.2	+0.0	+0.0	+0.0	28.5	46.0	-17.5	White
26	14.752M	21.8	+9.8 +0.5	+0.1	+0.1	+0.2	+0.0	32.5	50.0	-17.5	White
27	14.697M	21.6	+9.8 +0.5	+0.1	+0.1	+0.2	+0.0	32.3	50.0	-17.7	White
28	706.312k	17.6	+9.9 +0.5	+0.2	+0.0	+0.0	+0.0	28.2	46.0	-17.8	White
29	702.676k	17.5	+9.9 +0.5	+0.2	+0.0	+0.0	+0.0	28.1	46.0	-17.9	White

30	604.503k	17.3	+9.9 +0.5	+0.2	+0.0	+0.0	+0.0	27.9	46.0	-18.1	White
31	721.583k	17.3	+9.9 +0.5	+0.2	+0.0	+0.0	+0.0	27.9	46.0	-18.1	White
32	718.674k	17.0	+9.9 +0.5	+0.2	+0.0	+0.0	+0.0	27.6	46.0	-18.4	White
33	14.544M	20.9	+9.8 +0.5	+0.1	+0.1	+0.2	+0.0	31.6	50.0	-18.4	White
34	728.128k	16.7	+9.9 +0.5	+0.2	+0.0	+0.0	+0.0	27.3	46.0	-18.7	White
35	12.634M	20.2	+9.9 +0.5	+0.1	+0.1	+0.2	+0.0	31.0	50.0	-19.0	White
36	29.952M	19.3	+10.0 +0.8	+0.3	+0.1	+0.3	+0.0	30.8	50.0	-19.2	White
37	739.763k	16.1	+9.9 +0.5	+0.2	+0.0	+0.0	+0.0	26.7	46.0	-19.3	White
38	802.303k	15.4	+9.8 +0.5	+0.2	+0.0	+0.0	+0.0	25.9	46.0	-20.1	White
39	755.762k	15.3	+9.8 +0.5	+0.2	+0.0	+0.0	+0.0	25.8	46.0	-20.2	White
40	1.996M	15.4	+9.8 +0.4	+0.1	+0.0	+0.1	+0.0	25.8	46.0	-20.2	White
41	15.040M	18.9	+9.8 +0.5	+0.2	+0.1	+0.2	+0.0	29.7	50.0	-20.3	White
42	809.575k	15.1	+9.8 +0.5	+0.2	+0.0	+0.0	+0.0	25.6	46.0	-20.4	White
43	27.122M	18.3	+9.9 +0.8	+0.2	+0.1	+0.3	+0.0	29.6	50.0	-20.4	White
44	232.182k	13.8	+9.9 +1.4	+0.1	+0.0	+0.0	+0.0	25.2	52.4	-27.2	White
^	232.182k	47.3	+9.9 +1.4	+0.1	+0.0	+0.0	+0.0	58.7	52.4	+6.3	White
46	398.465k	8.9	+9.8 +0.7	+0.1	+0.0	+0.0	+0.0	19.5	47.9	-28.4	White
^	398.465k	38.3	+9.8 +0.7	+0.1	+0.0	+0.0	+0.0	48.9	47.9	+1.0	White
48	308.269k	9.7	+9.8 +0.9	+0.1	+0.0	+0.0	+0.0	20.5	50.0	-29.5	White
^	308.269k	38.1	+9.8 +0.9	+0.1	+0.0	+0.0	+0.0	48.9	50.0	-1.1	White

CKC Laboratories, Inc. Date: 1/4/2012 Time: 09:23:08 idOnDemand WO#: 91345 Model: 8800 SN: None
15.207 AC Mains - Average Test Lead: White 120V 60Hz Sequence#: 28 Ext ATTN: 0 dB



— Sweep Data	— Readings
○ Peak Readings	× QP Readings
* Average Readings	▼ Ambient
— 1 - 15.207 AC Mains - Average	— 2 - 15.207 AC Mains - Quasi-peak

Test Location: CKC Laboratories, Inc. • 1120 Fulton Place. • Fremont, CA 94539 • (510) 249-1170

Customer: **idOnDemand**
 Specification: **15.207 AC Mains - Average**
 Work Order #: **91345**
 Test Type: **Conducted Emissions**
 Equipment: **TouchSecure Reader**
 Manufacturer: **idOnDemand**
 Model: **8800**
 S/N: **None**

Date: 1/4/2012
 Time: 08:37:46
 Sequence#: 31
 Tested By: A Brar
 120V 60Hz

Test Equipment:

ID	Asset #	Description	Model	Calibration Date	Cal Due Date
	AN02660	Spectrum Analyzer	E4446A	11/3/2011	11/3/2013
T1	ANP01211	Attenuator	23-10-34	4/15/2011	4/15/2013
T2	ANP05258	High Pass Filter	HE9615-150K-50-720B	12/2/2010	12/2/2012
T3	ANP05300	Cable	RG214/U	3/7/2011	3/7/2013
T4	ANP05440	Cable		3/7/2011	3/7/2013
T5	AN00493	50uH LISN-L1 (L) Loss W/O European Adapter	3816/NM	3/10/2011	3/10/2013
	AN00493	50uH LISN-L(2) N Loss W/O European Adapter	3816/NM	3/10/2011	3/10/2013

Equipment Under Test (* = EUT):

Function	Manufacturer	Model #	S/N
TouchSecure Reader*	idOnDemand	8800	None

Support Devices:

Function	Manufacturer	Model #	S/N
DC Power Supply	Protek	3006B	AN:03088, SN:AG4070

Test Conditions / Notes:

Conducted Emissions. 0.15-30MHz. Highest generated frequency in the device is 48MHz.
 Temperature: 19.8°C, Atmospheric Pressure: 1028mbar & Relative Humidity: 40%
 Transmit Frequency: 13.56MHz Modulated & 125kHz Modulated. The 13.56MHz RF output is terminated into 50 Ω. The EUT is powered by the DC Power Supply. Conducted emissions are being performed on AC input of the DC Power supply.

Ext Attn: 0 dB

Measurement Data:

Reading listed by margin.

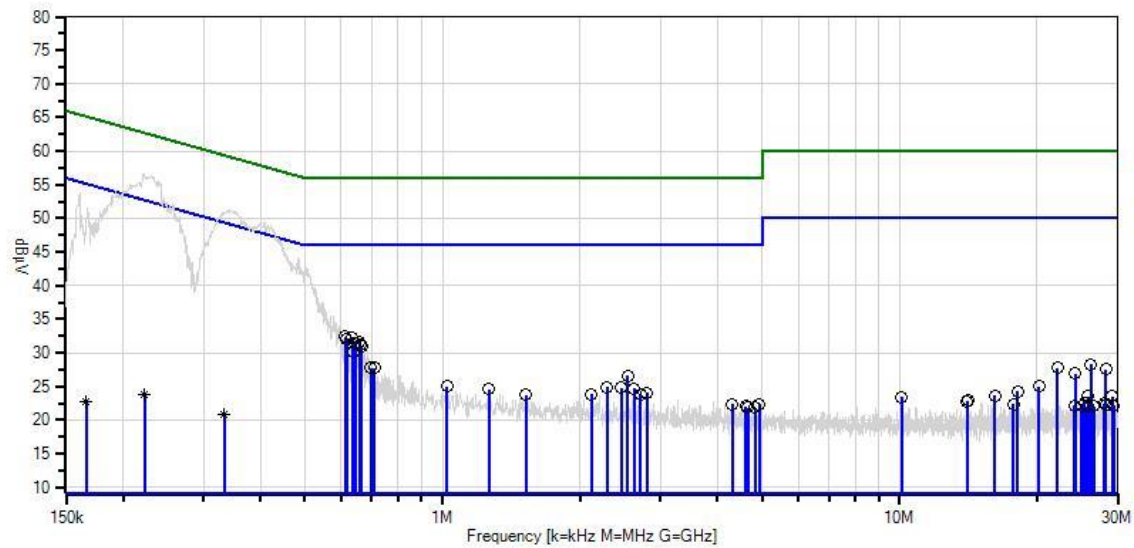
Test Lead: Black

#	Freq	Rdng	T1 T5	T2	T3	T4	Dist	Corr	Spec	Margin	Polar
	MHz	dBμV	dB	dB	dB	dB	Table	dBμV	dBμV	dB	Ant
1	612.503k	21.8	+9.9 +0.5	+0.2	+0.0	+0.0	+0.0	32.4	46.0	-13.6	Black
2	635.046k	21.7	+9.9 +0.5	+0.2	+0.0	+0.0	+0.0	32.3	46.0	-13.7	Black
3	616.139k	21.5	+9.9 +0.5	+0.2	+0.0	+0.0	+0.0	32.1	46.0	-13.9	Black
4	657.590k	21.0	+9.9 +0.5	+0.2	+0.0	+0.0	+0.0	31.6	46.0	-14.4	Black

5	645.227k	20.9	+9.9 +0.5	+0.2	+0.0	+0.0	+0.0	31.5	46.0	-14.5	Black
6	661.226k	20.6	+9.9 +0.5	+0.2	+0.0	+0.0	+0.0	31.2	46.0	-14.8	Black
7	665.589k	20.3	+9.9 +0.5	+0.2	+0.0	+0.0	+0.0	30.9	46.0	-15.1	Black
8	639.410k	19.5	+9.9 +0.5	+0.2	+0.0	+0.0	+0.0	30.1	46.0	-15.9	Black
9	696.132k	17.2	+9.9 +0.5	+0.2	+0.0	+0.0	+0.0	27.8	46.0	-18.2	Black
10	708.494k	17.2	+9.9 +0.5	+0.2	+0.0	+0.0	+0.0	27.8	46.0	-18.2	Black
11	2.540M	16.1	+9.8 +0.4	+0.2	+0.0	+0.1	+0.0	26.6	46.0	-19.4	Black
12	1.022M	14.6	+9.8 +0.4	+0.2	+0.0	+0.0	+0.0	25.0	46.0	-21.0	Black
13	2.289M	14.5	+9.8 +0.4	+0.1	+0.0	+0.1	+0.0	24.9	46.0	-21.1	Black
14	2.459M	14.3	+9.8 +0.4	+0.2	+0.0	+0.1	+0.0	24.8	46.0	-21.2	Black
15	2.629M	14.2	+9.8 +0.4	+0.2	+0.0	+0.1	+0.0	24.7	46.0	-21.3	Black
16	1.264M	14.1	+9.8 +0.4	+0.2	+0.0	+0.1	+0.0	24.6	46.0	-21.4	Black
17	26.231M	17.0	+9.9 +0.7	+0.3	+0.1	+0.3	+0.0	28.3	50.0	-21.7	Black
18	2.799M	13.6	+9.8 +0.4	+0.2	+0.0	+0.1	+0.0	24.1	46.0	-21.9	Black
19	2.119M	13.4	+9.8 +0.4	+0.1	+0.0	+0.1	+0.0	23.8	46.0	-22.2	Black
20	2.714M	13.3	+9.8 +0.4	+0.2	+0.0	+0.1	+0.0	23.8	46.0	-22.2	Black
21	22.193M	16.4	+9.9 +1.0	+0.2	+0.1	+0.2	+0.0	27.8	50.0	-22.2	Black
22	1.524M	13.3	+9.8 +0.4	+0.1	+0.0	+0.1	+0.0	23.7	46.0	-22.3	Black
23	28.246M	16.2	+9.9 +0.8	+0.2	+0.1	+0.3	+0.0	27.5	50.0	-22.5	Black
24	24.217M	15.7	+9.9 +0.7	+0.2	+0.1	+0.3	+0.0	26.9	50.0	-23.1	Black
25	4.305M	12.0	+9.8 +0.4	+0.1	+0.0	+0.1	+0.0	22.4	46.0	-23.6	Black
26	4.934M	11.8	+9.9 +0.5	+0.1	+0.0	+0.1	+0.0	22.4	46.0	-23.6	Black
27	4.603M	11.6	+9.9 +0.4	+0.1	+0.0	+0.1	+0.0	22.1	46.0	-23.9	Black
28	4.666M	11.3	+9.9 +0.4	+0.1	+0.0	+0.1	+0.0	21.8	46.0	-24.2	Black
29	4.832M	11.3	+9.9 +0.4	+0.1	+0.0	+0.1	+0.0	21.8	46.0	-24.2	Black
30	20.175M	13.9	+9.8 +0.9	+0.1	+0.1	+0.2	+0.0	25.0	50.0	-25.0	Black

31	18.157M	13.3	+9.9 +0.7	+0.1	+0.1	+0.2	+0.0	24.3	50.0	-25.7	Black
32	16.148M	12.8	+9.8 +0.5	+0.2	+0.1	+0.2	+0.0	23.6	50.0	-26.4	Black
33	25.875M	12.2	+9.9 +0.7	+0.3	+0.1	+0.3	+0.0	23.5	50.0	-26.5	Black
34	29.226M	12.0	+10.0 +0.8	+0.3	+0.1	+0.3	+0.0	23.5	50.0	-26.5	Black
35	10.094M	12.7	+9.8 +0.4	+0.2	+0.1	+0.2	+0.0	23.4	50.0	-26.6	Black
36	14.121M	12.2	+9.8 +0.5	+0.1	+0.1	+0.2	+0.0	22.9	50.0	-27.1	Black
37	14.031M	12.0	+9.8 +0.5	+0.1	+0.1	+0.2	+0.0	22.7	50.0	-27.3	Black
38	25.375M	11.3	+9.9 +0.7	+0.3	+0.1	+0.3	+0.0	22.6	50.0	-27.4	Black
39	28.061M	11.2	+9.9 +0.8	+0.2	+0.1	+0.3	+0.0	22.5	50.0	-27.5	Black
40	17.743M	11.4	+9.9 +0.7	+0.1	+0.1	+0.2	+0.0	22.4	50.0	-27.6	Black
41	28.314M	11.1	+9.9 +0.8	+0.2	+0.1	+0.3	+0.0	22.4	50.0	-27.6	Black
42	24.114M	11.0	+9.9 +0.7	+0.2	+0.1	+0.3	+0.0	22.2	50.0	-27.8	Black
43	29.397M	10.7	+10.0 +0.8	+0.3	+0.1	+0.3	+0.0	22.2	50.0	-27.8	Black
44	24.998M	10.8	+9.9 +0.7	+0.3	+0.1	+0.3	+0.0	22.1	50.0	-27.9	Black
45	25.772M	10.8	+9.9 +0.7	+0.3	+0.1	+0.3	+0.0	22.1	50.0	-27.9	Black
46	26.560M	10.8	+9.9 +0.7	+0.3	+0.1	+0.3	+0.0	22.1	50.0	-27.9	Black
47	333.626k Ave	10.2	+9.8 +0.8	+0.1	+0.0	+0.0	+0.0	20.9	49.4	-28.5	Black
^	333.626k	40.6	+9.8 +0.8	+0.1	+0.0	+0.0	+0.0	51.3	49.4	+1.9	Black
49	222.936k Ave	12.2	+9.9 +1.5	+0.1	+0.0	+0.0	+0.0	23.7	52.7	-29.0	Black
^	222.936k	45.0	+9.9 +1.5	+0.1	+0.0	+0.0	+0.0	56.5	52.7	+3.8	Black
51	165.969k Ave	10.2	+9.9 +2.2	+0.5	+0.0	+0.0	+0.0	22.8	55.2	-32.4	Black
^	165.969k	41.4	+9.9 +2.2	+0.5	+0.0	+0.0	+0.0	54.0	55.2	-1.2	Black

CKC Laboratories, Inc. Date: 1/4/2012 Time: 08:37:46 idOnDemand WO#: 91345 Model: 8800 SN: None
15.207 AC Mains - Average Test Lead: Black 120V 60Hz Sequence#: 31 Ext ATTN: 0 dB



— Sweep Data	— Readings
○ Peak Readings	× QP Readings
* Average Readings	▼ Ambient
— 1 - 15.207 AC Mains - Average	— 2 - 15.207 AC Mains - Quasi-peak

Test Location: CKC Laboratories, Inc. • 1120 Fulton Place. • Fremont, CA 94539 • (510) 249-1170

Customer: **idOnDemand**
 Specification: **15.207 AC Mains - Average**
 Work Order #: **91345**
 Test Type: **Conducted Emissions**
 Equipment: **TouchSecure Reader / Programmer**
 Manufacturer: **idOnDemand**
 Model: **8805**
 S/N: **None**

Date: 1/4/2012
 Time: 08:43:48
 Sequence#: 32
 Tested By: A Brar
 120V 60Hz

Test Equipment:

ID	Asset #	Description	Model	Calibration Date	Cal Due Date
	AN02660	Spectrum Analyzer	E4446A	11/3/2011	11/3/2013
T1	ANP01211	Attenuator	23-10-34	4/15/2011	4/15/2013
T2	ANP05258	High Pass Filter	HE9615-150K-50-720B	12/2/2010	12/2/2012
T3	ANP05300	Cable	RG214/U	3/7/2011	3/7/2013
T4	ANP05440	Cable		3/7/2011	3/7/2013
	AN00493	50uH LISN-L1 (L) Loss W/O European Adapter	3816/NM	3/10/2011	3/10/2013
T5	AN00493	50uH LISN-L(2) N Loss W/O European Adapter	3816/NM	3/10/2011	3/10/2013

Equipment Under Test (* = EUT):

Function	Manufacturer	Model #	S/N
TouchSecure Reader / Programmer*	idOnDemand	8805	None

Support Devices:

Function	Manufacturer	Model #	S/N
DC Power Supply	Protek	3006B	AN:03088, SN:AG4070

Test Conditions / Notes:

Conducted Emissions. 0.15-30MHz. Highest generated frequency in the device is 48MHz.
 Temperature: 19.8° C, Atmospheric Pressure: 1028mbar & Relative Humidity: 40%
 Transmit Frequency: 13.56MHz Modulated & 125kHz Modulated. The 13.56MHz RF output is terminated into 50 Ω . The EUT is powered by the DC Power Supply. Conducted emissions are being performed on AC input of the DC Power supply.

Ext Attn: 0 dB

Measurement Data:

Reading listed by margin.

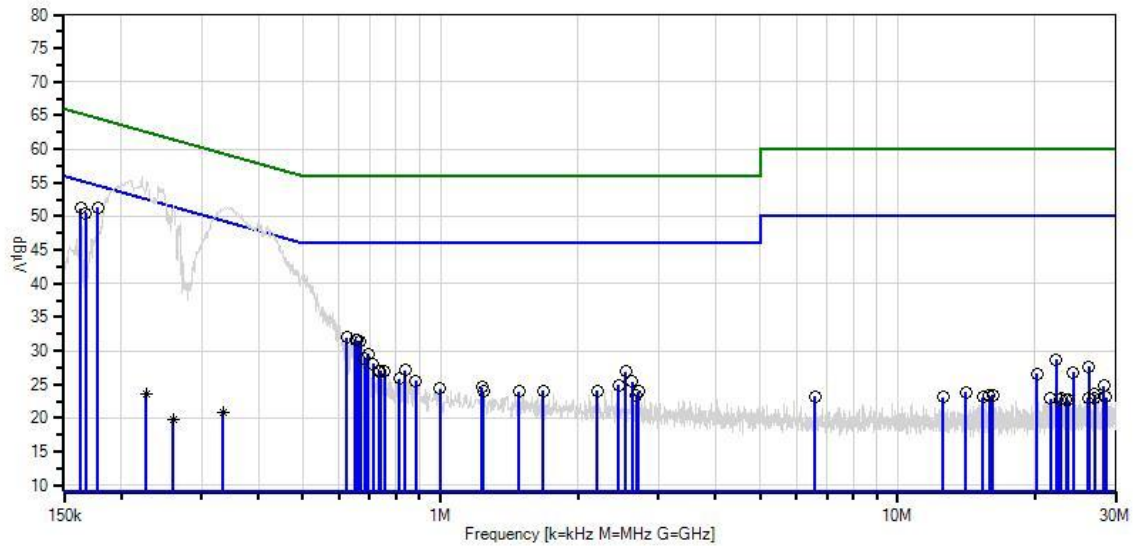
Test Lead: White

#	Freq MHz	Rdng dB μ V	T1 T5 dB	T2 dB	T3 dB	T4 dB	Dist Table	Corr dB μ V	Spec dB μ V	Margin dB	Polar Ant
1	177.633k	39.0	+9.9 +2.0	+0.4	+0.0	+0.0	+0.0	51.3	54.6	-3.3	White
2	163.089k	38.6	+9.9 +2.2	+0.5	+0.0	+0.0	+0.0	51.2	55.3	-4.1	White
3	167.452k	38.0	+9.9 +2.1	+0.5	+0.0	+0.0	+0.0	50.5	55.1	-4.6	White
4	624.137k	21.4	+9.9 +0.5	+0.2	+0.0	+0.0	+0.0	32.0	46.0	-14.0	White

5	651.044k	21.1	+9.9 +0.5	+0.2	+0.0	+0.0	+0.0	31.7	46.0	-14.3	White
6	657.589k	21.0	+9.9 +0.5	+0.2	+0.0	+0.0	+0.0	31.6	46.0	-14.4	White
7	668.497k	20.9	+9.9 +0.5	+0.2	+0.0	+0.0	+0.0	31.5	46.0	-14.5	White
8	693.222k	18.8	+9.9 +0.5	+0.2	+0.0	+0.0	+0.0	29.4	46.0	-16.6	White
9	681.587k	18.2	+9.9 +0.5	+0.2	+0.0	+0.0	+0.0	28.8	46.0	-17.2	White
10	712.856k	17.5	+9.9 +0.5	+0.2	+0.0	+0.0	+0.0	28.1	46.0	-17.9	White
11	835.754k	16.6	+9.8 +0.5	+0.2	+0.0	+0.0	+0.0	27.1	46.0	-18.9	White
12	732.491k	16.4	+9.9 +0.5	+0.2	+0.0	+0.0	+0.0	27.0	46.0	-19.0	White
13	737.581k	16.4	+9.9 +0.5	+0.2	+0.0	+0.0	+0.0	27.0	46.0	-19.0	White
14	754.307k	16.4	+9.8 +0.5	+0.2	+0.0	+0.0	+0.0	26.9	46.0	-19.1	White
15	2.544M	16.4	+9.8 +0.4	+0.2	+0.0	+0.1	+0.0	26.9	46.0	-19.1	White
16	812.484k	15.4	+9.8 +0.5	+0.2	+0.0	+0.0	+0.0	25.9	46.0	-20.1	White
17	881.458k	15.1	+9.8 +0.4	+0.1	+0.0	+0.1	+0.0	25.5	46.0	-20.5	White
18	2.629M	14.9	+9.8 +0.4	+0.2	+0.0	+0.1	+0.0	25.4	46.0	-20.6	White
19	2.455M	14.4	+9.8 +0.4	+0.2	+0.0	+0.1	+0.0	24.9	46.0	-21.1	White
20	22.202M	17.3	+9.9 +1.0	+0.2	+0.1	+0.2	+0.0	28.7	50.0	-21.3	White
21	1.230M	14.1	+9.8 +0.4	+0.2	+0.0	+0.1	+0.0	24.6	46.0	-21.4	White
22	996.281k	14.0	+9.8 +0.4	+0.2	+0.0	+0.0	+0.0	24.4	46.0	-21.6	White
23	2.204M	13.7	+9.8 +0.4	+0.1	+0.0	+0.1	+0.0	24.1	46.0	-21.9	White
24	1.677M	13.7	+9.8 +0.4	+0.1	+0.0	+0.1	+0.0	24.1	46.0	-21.9	White
25	1.243M	13.4	+9.8 +0.4	+0.2	+0.0	+0.1	+0.0	23.9	46.0	-22.1	White
26	1.485M	13.5	+9.8 +0.4	+0.1	+0.0	+0.1	+0.0	23.9	46.0	-22.1	White
27	2.710M	13.4	+9.8 +0.4	+0.2	+0.0	+0.1	+0.0	23.9	46.0	-22.1	White
28	26.231M	16.3	+9.9 +0.7	+0.3	+0.1	+0.3	+0.0	27.6	50.0	-22.4	White
29	2.680M	12.8	+9.8 +0.4	+0.2	+0.0	+0.1	+0.0	23.3	46.0	-22.7	White
30	24.217M	15.6	+9.9 +0.7	+0.2	+0.1	+0.3	+0.0	26.8	50.0	-23.2	White

31	20.175M	15.5	+9.8 +0.9	+0.1	+0.1	+0.2	+0.0	26.6	50.0	-23.4	White
32	28.253M	13.5	+9.9 +0.8	+0.2	+0.1	+0.3	+0.0	24.8	50.0	-25.2	White
33	14.121M	13.1	+9.8 +0.5	+0.1	+0.1	+0.2	+0.0	23.8	50.0	-26.2	White
34	27.006M	12.3	+9.9 +0.7	+0.2	+0.1	+0.3	+0.0	23.5	50.0	-26.5	White
35	16.139M	12.5	+9.8 +0.6	+0.2	+0.1	+0.2	+0.0	23.4	50.0	-26.6	White
36	15.878M	12.5	+9.8 +0.5	+0.2	+0.1	+0.2	+0.0	23.3	50.0	-26.7	White
37	6.589M	12.7	+9.8 +0.4	+0.1	+0.1	+0.1	+0.0	23.2	50.0	-26.8	White
38	12.589M	12.3	+9.9 +0.5	+0.1	+0.1	+0.2	+0.0	23.1	50.0	-26.9	White
39	15.373M	12.3	+9.8 +0.5	+0.2	+0.1	+0.2	+0.0	23.1	50.0	-26.9	White
40	28.568M	11.8	+9.9 +0.8	+0.2	+0.1	+0.3	+0.0	23.1	50.0	-26.9	White
41	22.770M	11.5	+9.9 +1.1	+0.2	+0.1	+0.2	+0.0	23.0	50.0	-27.0	White
42	26.129M	11.7	+9.9 +0.7	+0.3	+0.1	+0.3	+0.0	23.0	50.0	-27.0	White
43	26.978M	11.7	+9.9 +0.7	+0.3	+0.1	+0.3	+0.0	23.0	50.0	-27.0	White
44	21.625M	11.6	+9.9 +0.9	+0.2	+0.1	+0.2	+0.0	22.9	50.0	-27.1	White
45	22.625M	11.2	+9.9 +1.1	+0.2	+0.1	+0.2	+0.0	22.7	50.0	-27.3	White
46	23.347M	11.3	+9.9 +0.9	+0.2	+0.1	+0.3	+0.0	22.7	50.0	-27.3	White
47	23.628M	11.4	+9.9 +0.8	+0.2	+0.1	+0.3	+0.0	22.7	50.0	-27.3	White
48	334.425k Ave	10.2	+9.8 +0.8	+0.1	+0.0	+0.0	+0.0	20.9	49.3	-28.4	White
^	334.425k	40.7	+9.8 +0.8	+0.1	+0.0	+0.0	+0.0	51.4	49.3	+2.1	White
50	226.841k Ave	12.2	+9.9 +1.4	+0.1	+0.0	+0.0	+0.0	23.6	52.6	-29.0	White
^	226.841k	44.5	+9.9 +1.4	+0.1	+0.0	+0.0	+0.0	55.9	52.6	+3.3	White
52	260.357k Ave	8.7	+9.8 +1.1	+0.1	+0.0	+0.0	+0.0	19.7	51.4	-31.7	White
^	260.357k	38.0	+9.8 +1.1	+0.1	+0.0	+0.0	+0.0	49.0	51.4	-2.4	White

CKC Laboratories, Inc. Date: 1/4/2012 Time: 08:43:48 idOnDemand WO#: 91345 Model: 8805 SN: None
 15.207 AC Mains - Average Test Lead: White 120V 60Hz Sequence#: 32 Ext ATTN: 0 dB



Sweep Data
 ○ Peak Readings
 * Average Readings
 — 1 - 15.207 AC Mains - Average
 Readings
 × QP Readings
 ▼ Ambient
 — 2 - 15.207 AC Mains - Quasi-peak

Test Location: CKC Laboratories, Inc. • 1120 Fulton Place. • Fremont, CA 94539 • (510) 249-1170

Customer: **idOnDemand**
 Specification: **15.207 AC Mains - Average**
 Work Order #: **91345**
 Test Type: **Conducted Emissions**
 Equipment: **TouchSecure Reader / Programmer**
 Manufacturer: **idOnDemand**
 Model: **8805**
 S/N: **None**

Date: 1/4/2012
 Time: 09:01:00
 Sequence#: 30
 Tested By: A Brar
 120V 60Hz

Test Equipment:

ID	Asset #	Description	Model	Calibration Date	Cal Due Date
	AN02660	Spectrum Analyzer	E4446A	11/3/2011	11/3/2013
T1	ANP01211	Attenuator	23-10-34	4/15/2011	4/15/2013
T2	ANP05258	High Pass Filter	HE9615-150K-50-720B	12/2/2010	12/2/2012
T3	ANP05300	Cable	RG214/U	3/7/2011	3/7/2013
T4	ANP05440	Cable		3/7/2011	3/7/2013
T5	AN00493	50uH LISN-L1 (L) Loss W/O European Adapter	3816/NM	3/10/2011	3/10/2013
	AN00493	50uH LISN-L(2) N Loss W/O European Adapter	3816/NM	3/10/2011	3/10/2013

Equipment Under Test (* = EUT):

Function	Manufacturer	Model #	S/N
TouchSecure Reader / Programmer*	idOnDemand	8805	None

Support Devices:

Function	Manufacturer	Model #	S/N
DC Power Supply	Protek	3006B	AN:03088, SN:AG4070

Test Conditions / Notes:

Conducted Emissions. 0.15-30MHz. Highest generated frequency in the device is 48MHz.
 Temperature: 18° C, Atmospheric Pressure: 1022mbar & Relative Humidity: 35%
 Transmit Frequency: 13.56MHz Modulated & 125kHz Modulated. The EUT is powered by the DC Power Supply.
 Conducted emissions are being performed on AC input of the DC Power supply.
 The EUT initially was over the spec limit at the fundamental frequency. Once the antenna output was terminated with a 50Ω load, the fundamental was well below the spec limit. Therefore, the EUT is considered compliant.

Ext Attn: 0 dB

Measurement Data:

Reading listed by margin.

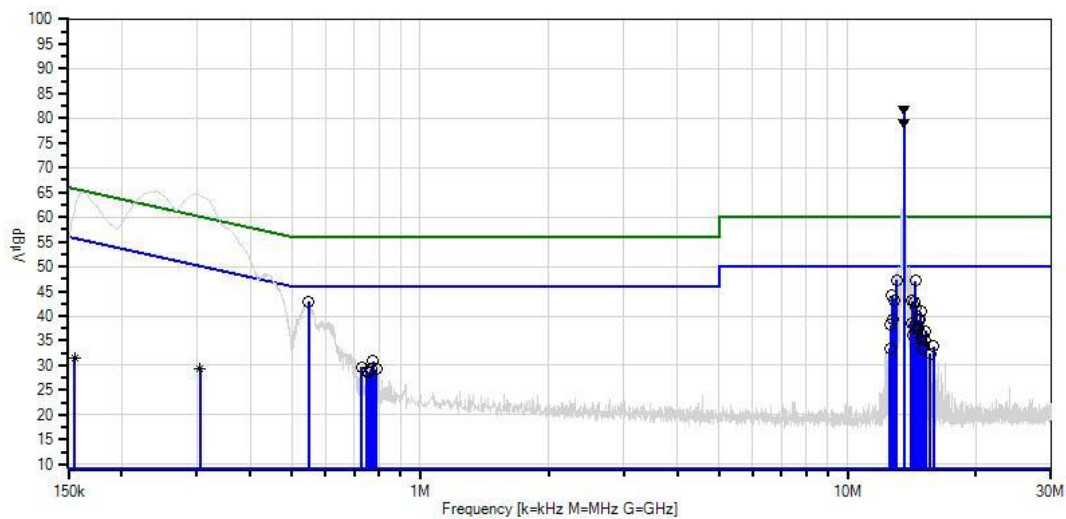
Test Lead: Black

#	Freq	Rdng	T1 T5	T2	T3	T4	Dist	Corr	Spec	Margin	Polar
	MHz	dBμV	dB	dB	dB	dB	Table	dBμV	dBμV	dB	Ant
1	13.560M Ambient	71.1	+9.8 +0.5	+0.1	+0.1	+0.2	+0.0	81.8	50.0 Fundamental. Average.	+31.8	Black
2	13.560M Ambient	71.1	+9.8 +0.5	+0.1	+0.1	+0.2	+0.0	81.8	50.0 Fundamental. Peak.	+31.8	Black
3	13.560M Ambient	68.4	+9.8 +0.5	+0.1	+0.1	+0.2	+0.0	79.1	50.0 Fundamental. QP.	+29.1	Black

4	13.031M	36.6	+9.8 +0.5	+0.1	+0.1	+0.2	+0.0	47.3	50.0	-2.7	Black
5	14.409M	36.4	+9.8 +0.5	+0.1	+0.1	+0.2	+0.0	47.1	50.0	-2.9	Black
6	548.508k	32.2	+9.9 +0.6	+0.2	+0.0	+0.0	+0.0	42.9	46.0	-3.1	Black
7	12.716M	33.3	+9.9 +0.5	+0.1	+0.1	+0.2	+0.0	44.1	50.0	-5.9	Black
8	12.923M	32.4	+9.9 +0.5	+0.1	+0.1	+0.2	+0.0	43.2	50.0	-6.8	Black
9	14.193M	32.3	+9.8 +0.5	+0.1	+0.1	+0.2	+0.0	43.0	50.0	-7.0	Black
10	14.328M	32.1	+9.8 +0.5	+0.1	+0.1	+0.2	+0.0	42.8	50.0	-7.2	Black
11	14.490M	31.1	+9.8 +0.5	+0.1	+0.1	+0.2	+0.0	41.8	50.0	-8.2	Black
12	14.833M	30.2	+9.8 +0.5	+0.1	+0.1	+0.2	+0.0	40.9	50.0	-9.1	Black
13	14.752M	28.6	+9.8 +0.5	+0.1	+0.1	+0.2	+0.0	39.3	50.0	-10.7	Black
14	12.788M	28.4	+9.9 +0.5	+0.1	+0.1	+0.2	+0.0	39.2	50.0	-10.8	Black
15	14.697M	28.5	+9.8 +0.5	+0.1	+0.1	+0.2	+0.0	39.2	50.0	-10.8	Black
16	14.139M	27.8	+9.8 +0.5	+0.1	+0.1	+0.2	+0.0	38.5	50.0	-11.5	Black
17	12.634M	27.5	+9.9 +0.4	+0.1	+0.1	+0.2	+0.0	38.2	50.0	-11.8	Black
18	14.301M	27.4	+9.8 +0.5	+0.1	+0.1	+0.2	+0.0	38.1	50.0	-11.9	Black
19	14.625M	26.8	+9.8 +0.5	+0.1	+0.1	+0.2	+0.0	37.5	50.0	-12.5	Black
20	14.544M	26.7	+9.8 +0.5	+0.1	+0.1	+0.2	+0.0	37.4	50.0	-12.6	Black
21	15.256M	26.2	+9.8 +0.5	+0.2	+0.1	+0.2	+0.0	37.0	50.0	-13.0	Black
22	14.274M	25.3	+9.8 +0.5	+0.1	+0.1	+0.2	+0.0	36.0	50.0	-14.0	Black
23	15.040M	25.2	+9.8 +0.5	+0.2	+0.1	+0.2	+0.0	36.0	50.0	-14.0	Black
24	14.905M	24.7	+9.8 +0.5	+0.1	+0.1	+0.2	+0.0	35.4	50.0	-14.6	Black
25	15.175M	24.2	+9.8 +0.5	+0.2	+0.1	+0.2	+0.0	35.0	50.0	-15.0	Black
26	775.396k	20.4	+9.8 +0.5	+0.2	+0.0	+0.0	+0.0	30.9	46.0	-15.1	Black
27	15.121M	23.0	+9.8 +0.5	+0.2	+0.1	+0.2	+0.0	33.8	50.0	-16.2	Black
28	15.887M	23.0	+9.8 +0.5	+0.2	+0.1	+0.2	+0.0	33.8	50.0	-16.2	Black
29	730.309k	19.1	+9.9 +0.5	+0.2	+0.0	+0.0	+0.0	29.7	46.0	-16.3	Black

30	12.580M	22.8	+9.9 +0.4	+0.1	+0.1	+0.2	+0.0	33.5	50.0	-16.5	Black
31	14.959M	22.8	+9.8 +0.5	+0.1	+0.1	+0.2	+0.0	33.5	50.0	-16.5	Black
32	767.397k	18.7	+9.8 +0.5	+0.2	+0.0	+0.0	+0.0	29.2	46.0	-16.8	Black
33	788.486k	18.7	+9.8 +0.5	+0.2	+0.0	+0.0	+0.0	29.2	46.0	-16.8	Black
34	749.944k	18.3	+9.8 +0.5	+0.2	+0.0	+0.0	+0.0	28.8	46.0	-17.2	Black
35	757.216k	18.0	+9.8 +0.5	+0.2	+0.0	+0.0	+0.0	28.5	46.0	-17.5	Black
36	15.598M	21.6	+9.8 +0.5	+0.2	+0.1	+0.2	+0.0	32.4	50.0	-17.6	Black
37	305.244k	18.5	+9.8 +0.9	+0.1	+0.0	+0.0	+0.0	29.3	50.1	-20.8	Black
^	305.244k	53.8	+9.8 +0.9	+0.1	+0.0	+0.0	+0.0	64.6	50.1	+14.5	Black
39	155.399k	18.7	+9.9 +2.3	+0.7	+0.0	+0.0	+0.0	31.6	55.7	-24.1	Black
^	155.399k	52.5	+9.9 +2.3	+0.7	+0.0	+0.0	+0.0	65.4	55.7	+9.7	Black

CKC Laboratories, Inc. Date: 1/4/2012 Time: 09:01:00 idOnDemand WO#: 91345 Model: 8805 SN: None
15.207 AC Mains - Average Test Lead: Black 120V 60Hz Sequence#: 30 Ext ATTN: 0 dB



— Sweep Data
○ Peak Readings
* Average Readings
— 1 - 15.207 AC Mains - Average
— Readings
× QP Readings
▼ Ambient
— 2 - 15.207 AC Mains - Quasi-peak

Test Location: CKC Laboratories, Inc. • 1120 Fulton Place. • Fremont, CA 94539 • (510) 249-1170

Customer: **idOnDemand**
 Specification: **15.207 AC Mains - Average**
 Work Order #: **91345**
 Test Type: **Conducted Emissions**
 Equipment: **TouchSecure Reader / Programmer**
 Manufacturer: **idOnDemand**
 Model: **8805**
 S/N: **None**

Date: 1/4/2012
 Time: 09:09:33
 Sequence#: 29
 Tested By: A Brar
 120V 60Hz

Test Equipment:

ID	Asset #	Description	Model	Calibration Date	Cal Due Date
	AN02660	Spectrum Analyzer	E4446A	11/3/2011	11/3/2013
T1	ANP01211	Attenuator	23-10-34	4/15/2011	4/15/2013
T2	ANP05258	High Pass Filter	HE9615-150K-50-720B	12/2/2010	12/2/2012
T3	ANP05300	Cable	RG214/U	3/7/2011	3/7/2013
T4	ANP05440	Cable		3/7/2011	3/7/2013
	AN00493	50uH LISN-L1 (L) Loss W/O European Adapter	3816/NM	3/10/2011	3/10/2013
T5	AN00493	50uH LISN-L(2) N Loss W/O European Adapter	3816/NM	3/10/2011	3/10/2013

Equipment Under Test (* = EUT):

Function	Manufacturer	Model #	S/N
TouchSecure Reader / Programmer*	idOnDemand	8805	None

Support Devices:

Function	Manufacturer	Model #	S/N
DC Power Supply	Protek	3006B	AN:03088, SN:AG4070

Test Conditions / Notes:

Conducted Emissions. 0.15-30MHz. Highest generated frequency in the device is 48MHz.
 Temperature: 18° C, Atmospheric Pressure: 1022mbar & Relative Humidity: 35%
 Transmit Frequency: 13.56MHz Modulated & 125kHz Modulated. The EUT is powered by the DC Power Supply.
 Conducted emissions are being performed on AC input of the DC Power supply.
 The EUT initially was over the spec limit at the fundamental frequency. Once the antenna output was terminated with a 50Ω load, the fundamental was well below the spec limit. Therefore, the EUT is considered compliant.

Ext Attn: 0 dB

Measurement Data:

Reading listed by margin.

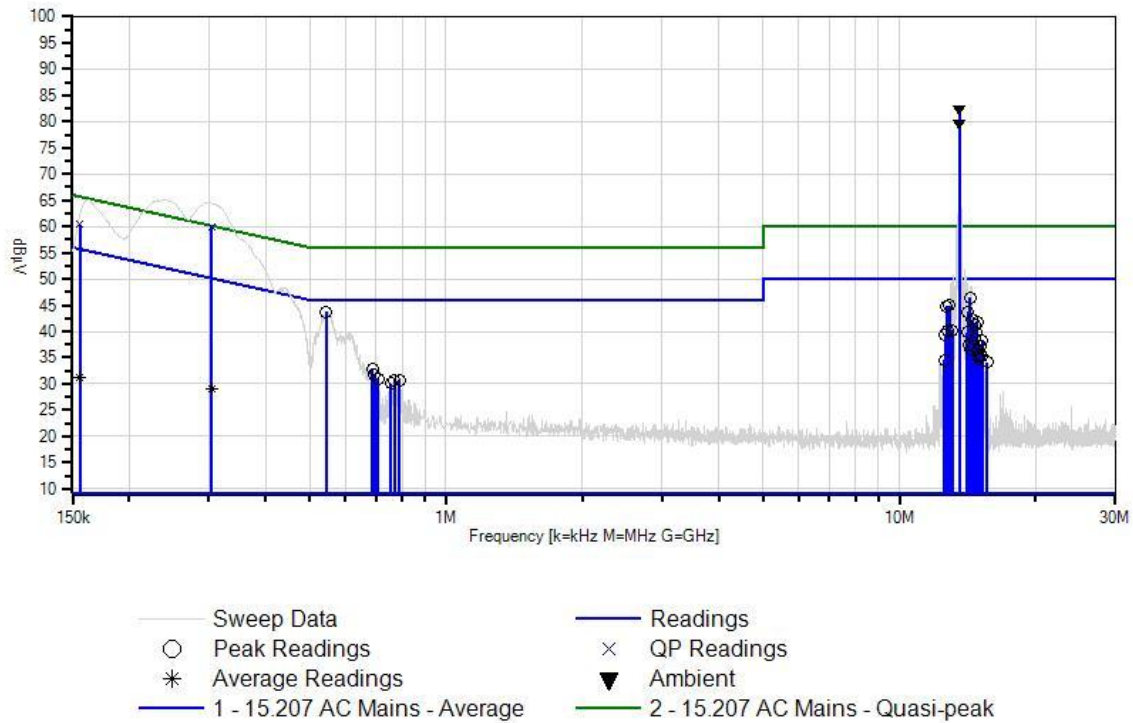
Test Lead: White

#	Freq	Rdng	T1 T5	T2	T3	T4	Dist	Corr	Spec	Margin	Polar
	MHz	dBμV	dB	dB	dB	dB	Table	dBμV	dBμV	dB	Ant
1	13.560M	71.8	+9.8 +0.5	+0.1	+0.1	+0.2	+0.0	82.5	50.0	+32.5	White
	Ambient								Fundamental. QP.		
2	13.560M	71.8	+9.8 +0.5	+0.1	+0.1	+0.2	+0.0	82.5	50.0	+32.5	White
	Ambient								Fundamental. Peak.		
3	13.560M	69.0	+9.8 +0.5	+0.1	+0.1	+0.2	+0.0	79.7	50.0	+29.7	White
	Ambient								Fundamental. Average.		

4	303.771k QP	49.2	+9.8 +0.9	+0.1	+0.0	+0.0	+0.0	60.0	60.1	-0.1	White
5	544.873k	33.2	+9.8 +0.6	+0.1	+0.0	+0.0	+0.0	43.7	46.0	-2.3	White
6	14.328M	35.7	+9.8 +0.5	+0.1	+0.1	+0.2	+0.0	46.4	50.0	-3.6	White
7	12.923M	34.2	+9.9 +0.5	+0.1	+0.1	+0.2	+0.0	45.0	50.0	-5.0	White
8	12.716M	34.0	+9.9 +0.5	+0.1	+0.1	+0.2	+0.0	44.8	50.0	-5.2	White
9	156.053k QP	47.6	+9.9 +2.3	+0.6	+0.0	+0.0	+0.0	60.4	65.7	-5.3	White
10	14.193M	33.1	+9.8 +0.5	+0.1	+0.1	+0.2	+0.0	43.8	50.0	-6.2	White
11	14.490M	31.5	+9.8 +0.5	+0.1	+0.1	+0.2	+0.0	42.2	50.0	-7.8	White
12	14.833M	31.2	+9.8 +0.5	+0.1	+0.1	+0.2	+0.0	41.9	50.0	-8.1	White
13	14.697M	30.6	+9.8 +0.5	+0.1	+0.1	+0.2	+0.0	41.3	50.0	-8.7	White
14	13.094M	29.5	+9.8 +0.5	+0.1	+0.1	+0.2	+0.0	40.2	50.0	-9.8	White
15	12.788M	29.3	+9.9 +0.5	+0.1	+0.1	+0.2	+0.0	40.1	50.0	-9.9	White
16	14.752M	29.3	+9.8 +0.5	+0.1	+0.1	+0.2	+0.0	40.0	50.0	-10.0	White
17	14.139M	29.1	+9.8 +0.5	+0.1	+0.1	+0.2	+0.0	39.8	50.0	-10.2	White
18	12.634M	28.5	+9.9 +0.5	+0.1	+0.1	+0.2	+0.0	39.3	50.0	-10.7	White
19	14.616M	27.9	+9.8 +0.5	+0.1	+0.1	+0.2	+0.0	38.6	50.0	-11.4	White
20	15.256M	27.5	+9.8 +0.5	+0.2	+0.1	+0.2	+0.0	38.3	50.0	-11.7	White
21	14.274M	26.7	+9.8 +0.5	+0.1	+0.1	+0.2	+0.0	37.4	50.0	-12.6	White
22	14.544M	26.6	+9.8 +0.5	+0.1	+0.1	+0.2	+0.0	37.3	50.0	-12.7	White
23	15.049M	26.5	+9.8 +0.5	+0.2	+0.1	+0.2	+0.0	37.3	50.0	-12.7	White
24	688.860k	22.3	+9.9 +0.5	+0.2	+0.0	+0.0	+0.0	32.9	46.0	-13.1	White
25	14.364M	25.8	+9.8 +0.5	+0.1	+0.1	+0.2	+0.0	36.5	50.0	-13.5	White
26	14.914M	25.8	+9.8 +0.5	+0.1	+0.1	+0.2	+0.0	36.5	50.0	-13.5	White
27	695.404k	21.1	+9.9 +0.5	+0.2	+0.0	+0.0	+0.0	31.7	46.0	-14.3	White
28	15.121M	24.7	+9.8 +0.5	+0.2	+0.1	+0.2	+0.0	35.5	50.0	-14.5	White
29	15.175M	24.6	+9.8 +0.5	+0.2	+0.1	+0.2	+0.0	35.4	50.0	-14.6	White

30	14.968M	24.4	+9.8 +0.5	+0.2	+0.1	+0.2	+0.0	35.2	50.0	-14.8	White
31	707.767k	20.4	+9.9 +0.5	+0.2	+0.0	+0.0	+0.0	31.0	46.0	-15.0	White
32	789.941k	20.3	+9.8 +0.5	+0.2	+0.0	+0.0	+0.0	30.8	46.0	-15.2	White
33	14.941M	24.0	+9.8 +0.5	+0.1	+0.1	+0.2	+0.0	34.7	50.0	-15.3	White
34	771.034k	20.1	+9.8 +0.5	+0.2	+0.0	+0.0	+0.0	30.6	46.0	-15.4	White
35	12.580M	23.7	+9.9 +0.5	+0.1	+0.1	+0.2	+0.0	34.5	50.0	-15.5	White
36	15.598M	23.3	+9.8 +0.5	+0.2	+0.1	+0.2	+0.0	34.1	50.0	-15.9	White
37	755.035k	19.5	+9.8 +0.5	+0.2	+0.0	+0.0	+0.0	30.0	46.0	-16.0	White
38	303.771k Ave	18.3	+9.8 +0.9	+0.1	+0.0	+0.0	+0.0	29.1	50.1	-21.0	White
^	303.771k	53.8	+9.8 +0.9	+0.1	+0.0	+0.0	+0.0	64.6	50.1	+14.5	White
40	156.053k Ave	18.3	+9.9 +2.3	+0.6	+0.0	+0.0	+0.0	31.1	55.7	-24.6	White
^	156.053k	52.5	+9.9 +2.3	+0.6	+0.0	+0.0	+0.0	65.3	55.7	+9.6	White

CKC Laboratories, Inc. Date: 1/4/2012 Time: 09:09:33 idOnDemand WO#: 91345 Model: 8805 SN: None
15.207 AC Mains - Average Test Lead: White 120V 60Hz Sequence#: 29 Ext ATTN: 0 dB



Test Location: CKC Laboratories, Inc. • 1120 Fulton Place. • Fremont, CA 94539 • (510) 249-1170

Customer: **idOnDemand**
 Specification: **15.207 AC Mains - Average**
 Work Order #: **91345**
 Test Type: **Conducted Emissions**
 Equipment: **TouchSecure Reader / Programmer**
 Manufacturer: **idOnDemand**
 Model: **8805**
 S/N: **None**

Date: 1/4/2012
 Time: 08:56:19
 Sequence#: 34
 Tested By: A Brar
 120V 60Hz

Test Equipment:

ID	Asset #	Description	Model	Calibration Date	Cal Due Date
	AN02660	Spectrum Analyzer	E4446A	11/3/2011	11/3/2013
T1	ANP01211	Attenuator	23-10-34	4/15/2011	4/15/2013
T2	ANP05258	High Pass Filter	HE9615-150K-50-720B	12/2/2010	12/2/2012
T3	ANP05300	Cable	RG214/U	3/7/2011	3/7/2013
T4	ANP05440	Cable		3/7/2011	3/7/2013
T5	AN00493	50uH LISN-L1 (L) Loss W/O European Adapter	3816/NM	3/10/2011	3/10/2013
	AN00493	50uH LISN-L(2) N Loss W/O European Adapter	3816/NM	3/10/2011	3/10/2013

Equipment Under Test (* = EUT):

Function	Manufacturer	Model #	S/N
TouchSecure Reader / Programmer*	idOnDemand	8805	None

Support Devices:

Function	Manufacturer	Model #	S/N
DC Power Supply	Protek	3006B	AN:03088, SN:AG4070

Test Conditions / Notes:

Conducted Emissions. 0.15-30MHz. Highest generated frequency in the device is 48MHz.
 Temperature: 19.8° C, Atmospheric Pressure: 1028mbar & Relative Humidity: 40%
 Transmit Frequency: 13.56MHz Modulated & 125kHz Modulated. The 13.56MHz RF output is terminated into 50 Ω The EUT is powered by the DC Power Supply. Conducted emissions are being performed on AC input of the DC Power supply.

Ext Attn: 0 dB

Measurement Data:

Reading listed by margin.

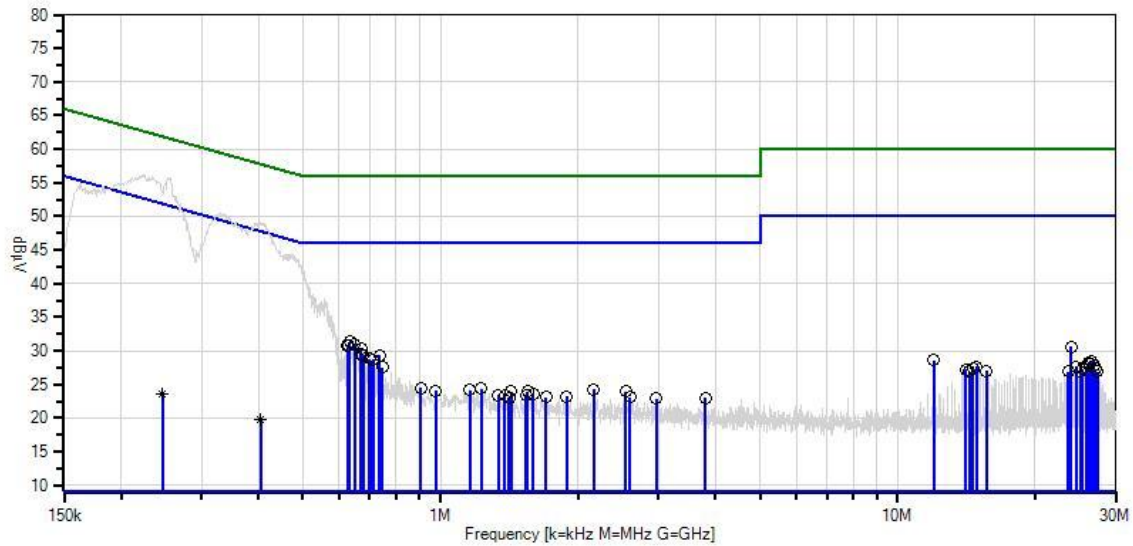
Test Lead: Black

#	Freq MHz	Rdng dB μ V	T1 T5 dB	T2 dB	T3 dB	T4 dB	Dist Table	Corr dB μ V	Spec dB μ V	Margin dB	Polar Ant
1	633.591k	20.7	+9.9 +0.5	+0.2	+0.0	+0.0	+0.0	31.3	46.0	-14.7	Black
2	649.590k	20.4	+9.9 +0.5	+0.2	+0.0	+0.0	+0.0	31.0	46.0	-15.0	Black
3	629.955k	20.2	+9.9 +0.5	+0.2	+0.0	+0.0	+0.0	30.8	46.0	-15.2	Black
4	626.319k	20.1	+9.9 +0.5	+0.2	+0.0	+0.0	+0.0	30.7	46.0	-15.3	Black

5	669.951k	19.8	+9.9 +0.5	+0.2	+0.0	+0.0	+0.0	30.4	46.0	-15.6	Black
6	672.133k	18.8	+9.9 +0.5	+0.2	+0.0	+0.0	+0.0	29.4	46.0	-16.6	Black
7	677.951k	18.7	+9.9 +0.5	+0.2	+0.0	+0.0	+0.0	29.3	46.0	-16.7	Black
8	735.400k	18.7	+9.9 +0.5	+0.2	+0.0	+0.0	+0.0	29.3	46.0	-16.7	Black
9	699.767k	18.2	+9.9 +0.5	+0.2	+0.0	+0.0	+0.0	28.8	46.0	-17.2	Black
10	712.129k	18.1	+9.9 +0.5	+0.2	+0.0	+0.0	+0.0	28.7	46.0	-17.3	Black
11	709.948k	18.0	+9.9 +0.5	+0.2	+0.0	+0.0	+0.0	28.6	46.0	-17.4	Black
12	745.581k	16.9	+9.9 +0.5	+0.2	+0.0	+0.0	+0.0	27.5	46.0	-18.5	Black
13	23.998M	19.4	+9.9 +0.7	+0.2	+0.1	+0.3	+0.0	30.6	50.0	-19.4	Black
14	12.004M	17.9	+9.9 +0.4	+0.1	+0.1	+0.2	+0.0	28.6	50.0	-21.4	Black
15	906.974k	14.1	+9.8 +0.4	+0.1	+0.0	+0.1	+0.0	24.5	46.0	-21.5	Black
16	26.622M	17.2	+9.9 +0.7	+0.3	+0.1	+0.3	+0.0	28.5	50.0	-21.5	Black
17	1.226M	13.9	+9.8 +0.4	+0.2	+0.0	+0.1	+0.0	24.4	46.0	-21.6	Black
18	2.166M	13.9	+9.8 +0.4	+0.1	+0.0	+0.1	+0.0	24.3	46.0	-21.7	Black
19	1.158M	13.7	+9.8 +0.4	+0.2	+0.0	+0.1	+0.0	24.2	46.0	-21.8	Black
20	26.129M	16.9	+9.9 +0.7	+0.3	+0.1	+0.3	+0.0	28.2	50.0	-21.8	Black
21	975.018k	13.7	+9.8 +0.4	+0.2	+0.0	+0.0	+0.0	24.1	46.0	-21.9	Black
22	1.549M	13.6	+9.8 +0.4	+0.1	+0.0	+0.1	+0.0	24.0	46.0	-22.0	Black
23	2.544M	13.5	+9.8 +0.4	+0.2	+0.0	+0.1	+0.0	24.0	46.0	-22.0	Black
24	26.375M	16.7	+9.9 +0.7	+0.3	+0.1	+0.3	+0.0	28.0	50.0	-22.0	Black
25	1.426M	13.5	+9.8 +0.4	+0.1	+0.0	+0.1	+0.0	23.9	46.0	-22.1	Black
26	26.875M	16.6	+9.9 +0.7	+0.3	+0.1	+0.3	+0.0	27.9	50.0	-22.1	Black
27	1.596M	13.2	+9.8 +0.4	+0.1	+0.0	+0.1	+0.0	23.6	46.0	-22.4	Black
28	14.878M	16.9	+9.8 +0.5	+0.1	+0.1	+0.2	+0.0	27.6	50.0	-22.4	Black
29	25.875M	16.3	+9.9 +0.7	+0.3	+0.1	+0.3	+0.0	27.6	50.0	-22.4	Black
30	24.621M	16.3	+9.9 +0.7	+0.2	+0.1	+0.3	+0.0	27.5	50.0	-22.5	Black

31	1.336M	12.9	+9.8 +0.4	+0.2	+0.0	+0.1	+0.0	23.4	46.0	-22.6	Black
32	14.625M	16.7	+9.8 +0.5	+0.1	+0.1	+0.2	+0.0	27.4	50.0	-22.6	Black
33	1.541M	12.9	+9.8 +0.4	+0.1	+0.0	+0.1	+0.0	23.3	46.0	-22.7	Black
34	1.383M	12.8	+9.8 +0.4	+0.2	+0.0	+0.1	+0.0	23.3	46.0	-22.7	Black
35	27.122M	16.1	+9.9 +0.7	+0.2	+0.1	+0.3	+0.0	27.3	50.0	-22.7	Black
36	25.375M	16.0	+9.9 +0.7	+0.3	+0.1	+0.3	+0.0	27.3	50.0	-22.7	Black
37	1.889M	12.8	+9.8 +0.4	+0.1	+0.0	+0.1	+0.0	23.2	46.0	-22.8	Black
38	14.130M	16.5	+9.8 +0.5	+0.1	+0.1	+0.2	+0.0	27.2	50.0	-22.8	Black
39	1.702M	12.7	+9.8 +0.4	+0.1	+0.0	+0.1	+0.0	23.1	46.0	-22.9	Black
40	2.595M	12.6	+9.8 +0.4	+0.2	+0.0	+0.1	+0.0	23.1	46.0	-22.9	Black
41	1.413M	12.5	+9.8 +0.4	+0.2	+0.0	+0.1	+0.0	23.0	46.0	-23.0	Black
42	3.803M	12.5	+9.8 +0.4	+0.1	+0.1	+0.1	+0.0	23.0	46.0	-23.0	Black
43	15.625M	16.2	+9.8 +0.5	+0.2	+0.1	+0.2	+0.0	27.0	50.0	-23.0	Black
44	14.373M	16.2	+9.8 +0.5	+0.1	+0.1	+0.2	+0.0	26.9	50.0	-23.1	Black
45	2.965M	12.4	+9.8 +0.4	+0.2	+0.0	+0.1	+0.0	22.9	46.0	-23.1	Black
46	23.628M	15.6	+9.9 +0.8	+0.2	+0.1	+0.3	+0.0	26.9	50.0	-23.1	Black
47	27.376M	15.7	+9.9 +0.7	+0.2	+0.1	+0.3	+0.0	26.9	50.0	-23.1	Black
48	25.121M	15.6	+9.9 +0.7	+0.3	+0.1	+0.3	+0.0	26.9	50.0	-23.1	Black
49	404.101k Ave	9.1	+9.8 +0.7	+0.1	+0.0	+0.0	+0.0	19.7	47.8	-28.1	Black
^	404.101k	38.6	+9.8 +0.7	+0.1	+0.0	+0.0	+0.0	49.2	47.8	+1.4	Black
51	246.285k Ave	12.5	+9.8 +1.2	+0.1	+0.0	+0.0	+0.0	23.6	51.9	-28.3	Black
^	246.285k	44.8	+9.8 +1.2	+0.1	+0.0	+0.0	+0.0	55.9	51.9	+4.0	Black

CKC Laboratories, Inc. Date: 1/4/2012 Time: 08:56:19 idOnDemand WO#: 91345 Model: 8805 SN: None
15.207 AC Mains - Average Test Lead: Black 120V 60Hz Sequence#: 34 Ext ATTN: 0 dB



— Sweep Data	— Readings
○ Peak Readings	× QP Readings
* Average Readings	▼ Ambient
— 1 - 15.207 AC Mains - Average	— 2 - 15.207 AC Mains - Quasi-peak

Test Location: CKC Laboratories, Inc. • 1120 Fulton Place. • Fremont, CA 94539 • (510) 249-1170

Customer: **idOnDemand**
 Specification: **15.207 AC Mains - Average**
 Work Order #: **91345**
 Test Type: **Conducted Emissions**
 Equipment: **TouchSecure Reader / Programmer**
 Manufacturer: **idOnDemand**
 Model: **8805**
 S/N: **None**

Date: 1/4/2012
 Time: 08:52:32
 Sequence#: 33
 Tested By: A Brar
 120V 60Hz

Test Equipment:

ID	Asset #	Description	Model	Calibration Date	Cal Due Date
	AN02660	Spectrum Analyzer	E4446A	11/3/2011	11/3/2013
T1	ANP01211	Attenuator	23-10-34	4/15/2011	4/15/2013
T2	ANP05258	High Pass Filter	HE9615-150K-50-720B	12/2/2010	12/2/2012
T3	ANP05300	Cable	RG214/U	3/7/2011	3/7/2013
T4	ANP05440	Cable		3/7/2011	3/7/2013
	AN00493	50uH LISN-L1 (L) Loss W/O European Adapter	3816/NM	3/10/2011	3/10/2013
T5	AN00493	50uH LISN-L(2) N Loss W/O European Adapter	3816/NM	3/10/2011	3/10/2013

Equipment Under Test (* = EUT):

Function	Manufacturer	Model #	S/N
TouchSecure Reader / Programmer*	idOnDemand	8805	None

Support Devices:

Function	Manufacturer	Model #	S/N
DC Power Supply	Protek	3006B	AN:03088, SN:AG4070

Test Conditions / Notes:

Conducted Emissions. 0.15-30MHz. Highest generated frequency in the device is 48MHz.
 Temperature: 19.8° C, Atmospheric Pressure: 1028mbar & Relative Humidity: 40%
 Transmit Frequency: 13.56MHz Modulated & 125kHz Modulated. The 13.56MHz RF output is terminated into 50 Ω . The EUT is powered by the DC Power Supply. Conducted emissions are being performed on AC input of the DC Power supply.

Ext Attn: 0 dB

Measurement Data:

Reading listed by margin.

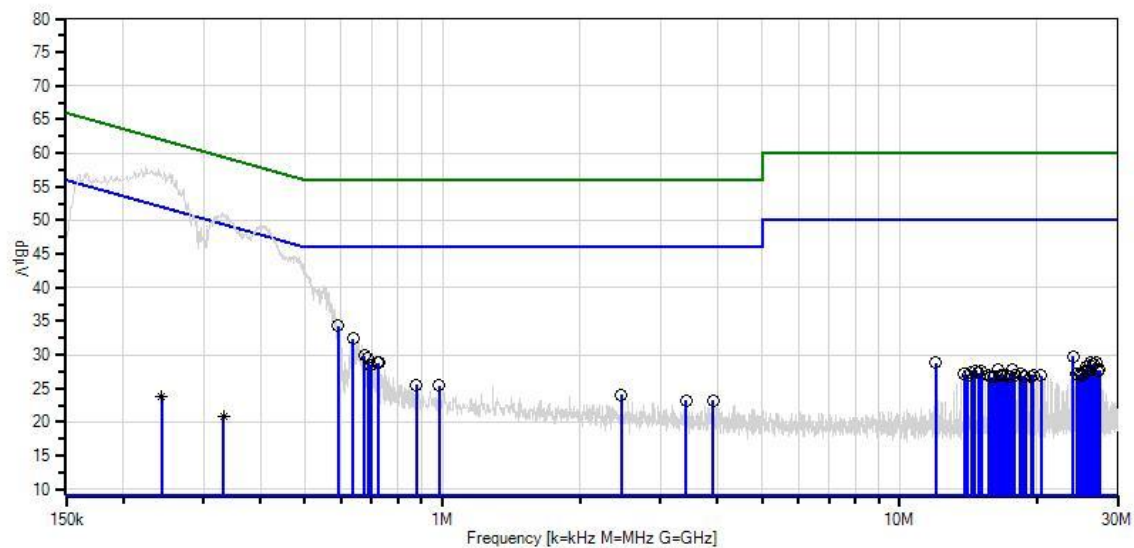
Test Lead: White

#	Freq MHz	Rdng dB μ V	T1 T5 dB	T2 dB	T3 dB	T4 dB	Dist Table	Corr dB μ V	Spec dB μ V	Margin dB	Polar Ant
1	589.959k	23.6	+9.9 +0.6	+0.2	+0.0	+0.0	+0.0	34.3	46.0	-11.7	White
2	636.500k	21.8	+9.9 +0.5	+0.2	+0.0	+0.0	+0.0	32.4	46.0	-13.6	White
3	674.315k	19.3	+9.9 +0.5	+0.2	+0.0	+0.0	+0.0	29.9	46.0	-16.1	White
4	685.950k	18.8	+9.9 +0.5	+0.2	+0.0	+0.0	+0.0	29.4	46.0	-16.6	White

5	723.037k	18.2	+9.9 +0.5	+0.2	+0.0	+0.0	+0.0	28.8	46.0	-17.2	White
6	725.946k	18.2	+9.9 +0.5	+0.2	+0.0	+0.0	+0.0	28.8	46.0	-17.2	White
7	696.131k	17.9	+9.9 +0.5	+0.2	+0.0	+0.0	+0.0	28.5	46.0	-17.5	White
8	23.998M	18.6	+9.9 +0.7	+0.2	+0.1	+0.3	+0.0	29.8	50.0	-20.2	White
9	875.751k	15.1	+9.8 +0.4	+0.1	+0.0	+0.1	+0.0	25.5	46.0	-20.5	White
10	983.523k	15.0	+9.8 +0.4	+0.2	+0.0	+0.0	+0.0	25.4	46.0	-20.6	White
11	26.129M	17.6	+9.9 +0.7	+0.3	+0.1	+0.3	+0.0	28.9	50.0	-21.1	White
12	12.004M	18.0	+9.9 +0.5	+0.1	+0.1	+0.2	+0.0	28.8	50.0	-21.2	White
13	26.875M	17.5	+9.9 +0.7	+0.3	+0.1	+0.3	+0.0	28.8	50.0	-21.2	White
14	26.622M	17.4	+9.9 +0.7	+0.3	+0.1	+0.3	+0.0	28.7	50.0	-21.3	White
15	25.628M	17.0	+9.9 +0.7	+0.3	+0.1	+0.3	+0.0	28.3	50.0	-21.7	White
16	26.375M	17.0	+9.9 +0.7	+0.3	+0.1	+0.3	+0.0	28.3	50.0	-21.7	White
17	2.459M	13.6	+9.8 +0.4	+0.2	+0.0	+0.1	+0.0	24.1	46.0	-21.9	White
18	16.373M	16.9	+9.8 +0.6	+0.2	+0.1	+0.2	+0.0	27.8	50.0	-22.2	White
19	17.625M	16.8	+9.9 +0.7	+0.1	+0.1	+0.2	+0.0	27.8	50.0	-22.2	White
20	27.376M	16.5	+9.9 +0.8	+0.2	+0.1	+0.3	+0.0	27.8	50.0	-22.2	White
21	27.122M	16.4	+9.9 +0.8	+0.2	+0.1	+0.3	+0.0	27.7	50.0	-22.3	White
22	14.625M	16.9	+9.8 +0.5	+0.1	+0.1	+0.2	+0.0	27.6	50.0	-22.4	White
23	15.121M	16.8	+9.8 +0.5	+0.2	+0.1	+0.2	+0.0	27.6	50.0	-22.4	White
24	25.375M	16.3	+9.9 +0.7	+0.3	+0.1	+0.3	+0.0	27.6	50.0	-22.4	White
25	25.875M	16.2	+9.9 +0.7	+0.3	+0.1	+0.3	+0.0	27.5	50.0	-22.5	White
26	14.373M	16.7	+9.8 +0.5	+0.1	+0.1	+0.2	+0.0	27.4	50.0	-22.6	White
27	14.878M	16.6	+9.8 +0.5	+0.1	+0.1	+0.2	+0.0	27.3	50.0	-22.7	White
28	3.412M	12.7	+9.8 +0.4	+0.2	+0.0	+0.1	+0.0	23.2	46.0	-22.8	White
29	3.905M	12.7	+9.8 +0.4	+0.1	+0.1	+0.1	+0.0	23.2	46.0	-22.8	White
30	18.373M	16.0	+9.9 +0.8	+0.1	+0.1	+0.2	+0.0	27.1	50.0	-22.9	White

31	13.878M	16.4	+9.8 +0.5	+0.1	+0.1	+0.2	+0.0	27.1	50.0	-22.9	White
32	24.875M	15.9	+9.9 +0.7	+0.2	+0.1	+0.3	+0.0	27.1	50.0	-22.9	White
33	24.374M	15.9	+9.9 +0.7	+0.2	+0.1	+0.3	+0.0	27.1	50.0	-22.9	White
34	16.625M	16.1	+9.8 +0.6	+0.2	+0.1	+0.2	+0.0	27.0	50.0	-23.0	White
35	15.625M	16.2	+9.8 +0.5	+0.2	+0.1	+0.2	+0.0	27.0	50.0	-23.0	White
36	14.121M	16.3	+9.8 +0.5	+0.1	+0.1	+0.2	+0.0	27.0	50.0	-23.0	White
37	16.878M	16.1	+9.8 +0.6	+0.2	+0.1	+0.2	+0.0	27.0	50.0	-23.0	White
38	25.128M	15.7	+9.9 +0.7	+0.3	+0.1	+0.3	+0.0	27.0	50.0	-23.0	White
39	19.625M	15.9	+9.8 +0.9	+0.1	+0.1	+0.2	+0.0	27.0	50.0	-23.0	White
40	17.130M	16.1	+9.9 +0.6	+0.1	+0.1	+0.2	+0.0	27.0	50.0	-23.0	White
41	17.878M	15.9	+9.9 +0.7	+0.1	+0.1	+0.2	+0.0	26.9	50.0	-23.1	White
42	20.373M	15.8	+9.8 +0.9	+0.1	+0.1	+0.2	+0.0	26.9	50.0	-23.1	White
43	16.130M	15.9	+9.8 +0.6	+0.2	+0.1	+0.2	+0.0	26.8	50.0	-23.2	White
44	18.625M	15.7	+9.9 +0.8	+0.1	+0.1	+0.2	+0.0	26.8	50.0	-23.2	White
45	17.373M	15.8	+9.9 +0.6	+0.1	+0.1	+0.2	+0.0	26.7	50.0	-23.3	White
46	15.878M	15.9	+9.8 +0.5	+0.2	+0.1	+0.2	+0.0	26.7	50.0	-23.3	White
47	19.373M	15.6	+9.8 +0.9	+0.1	+0.1	+0.2	+0.0	26.7	50.0	-23.3	White
48	18.878M	15.6	+9.9 +0.8	+0.1	+0.1	+0.2	+0.0	26.7	50.0	-23.3	White
49	242.626k Ave	12.5	+9.9 +1.3	+0.1	+0.0	+0.0	+0.0	23.8	52.0	-28.2	White
^	242.626k	46.3	+9.9 +1.3	+0.1	+0.0	+0.0	+0.0	57.6	52.0	+5.6	White
51	331.273k Ave	10.1	+9.8 +0.8	+0.1	+0.0	+0.0	+0.0	20.8	49.4	-28.6	White
^	331.273k	40.4	+9.8 +0.8	+0.1	+0.0	+0.0	+0.0	51.1	49.4	+1.7	White

CKC Laboratories, Inc. Date: 1/4/2012 Time: 08:52:32 idOnDemand WO#: 91345 Model: 8805 SN: None
15.207 AC Mains - Average Test Lead: White 120V 60Hz Sequence#: 33 Ext ATTN: 0 dB



— Sweep Data	— Readings
○ Peak Readings	× QP Readings
* Average Readings	▼ Ambient
— 1 - 15.207 AC Mains - Average	— 2 - 15.207 AC Mains - Quasi-peak

Test Setup Photos



TOUCHSECURE READER 8800



TOUCHSECURE READER / PROGRAMMER 8805

FCC 15.225(a) RF Power Output

Test Data

Test Location: CKC Laboratories, Inc. • 1120 Fulton Place. • Fremont, CA 94539 • (510) 249-1170

Customer: **idOnDemand**
 Specification: **15.225 Carrier and Spurious Emissions (13.110-14.010 MHz Transmitter)**
 Work Order #: **91345** Date: 12/15/2011
 Test Type: **Maximized Emissions** Time: 12:53:25
 Equipment: **TouchSecure Reader** Sequence#: 24
 Manufacturer: idOnDemand Tested By: A Brar
 Model: 8800
 S/N: None

Test Equipment:

ID	Asset #	Description	Model	Calibration Date	Cal Due Date
T1	ANP05300	Cable	RG214/U	3/7/2011	3/7/2013
T2	ANP05440	Cable		3/7/2011	3/7/2013
T3	AN00432	Loop Antenna	6502	3/31/2011	3/31/2013
	AN02660	Spectrum Analyzer	E4446A	11/3/2011	11/3/2013
	ANdBuA	Unit Conversion		4/12/2010	4/12/2012

Equipment Under Test (* = EUT):

Function	Manufacturer	Model #	S/N
TouchSecure Reader / Programmer	idOnDemand	8805	None
TouchSecure Reader*	idOnDemand	8800	None

Support Devices:

Function	Manufacturer	Model #	S/N
Wiegand Control Box	HID	83000BKE	None
DC Power Supply	Protek	3006B	AG4070
DMM	Fluke	DMM914	DMM914TW141024

Test Conditions / Notes:

Fundamental Radiated Emissions. 125k & 13.56MHz. RBW 3kHz, VBW 9.1kHz, Det Peak. Highest generated frequency in the device is 48MHz.
 Temperature: 18.6° C, Humidity: 32% & Atmospheric Pressure: 1022mbar
 Transmit Frequency: 13.56MHz Modulated & 125kHz Modulated.
 The EUT is powered by the laptop's USB power. The laptop is located outside the test chamber.
 FCC 15.225e is covered by this data sheet by varying the voltage to 85% and 115% of the nominal voltage and ensuring the carrier is not affected by this variation, this was done using a variable power source and a DMM listed under the supporting devices.

Ext Attn: 0 dB

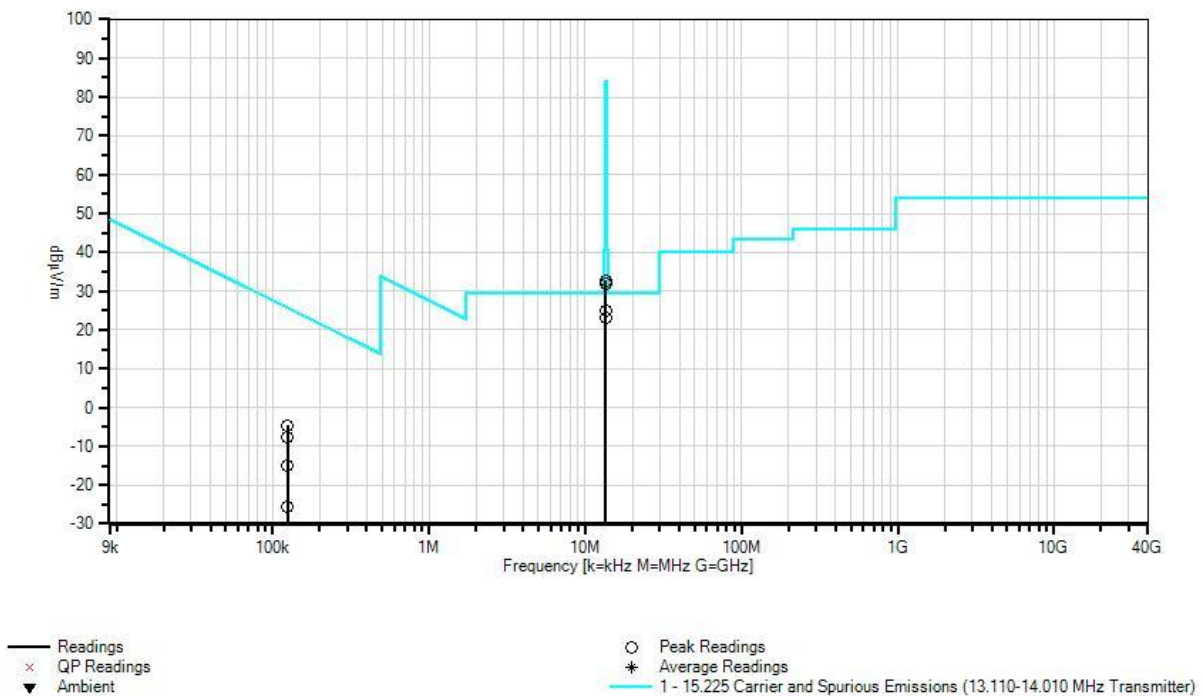
Measurement Data:

Reading listed by margin.

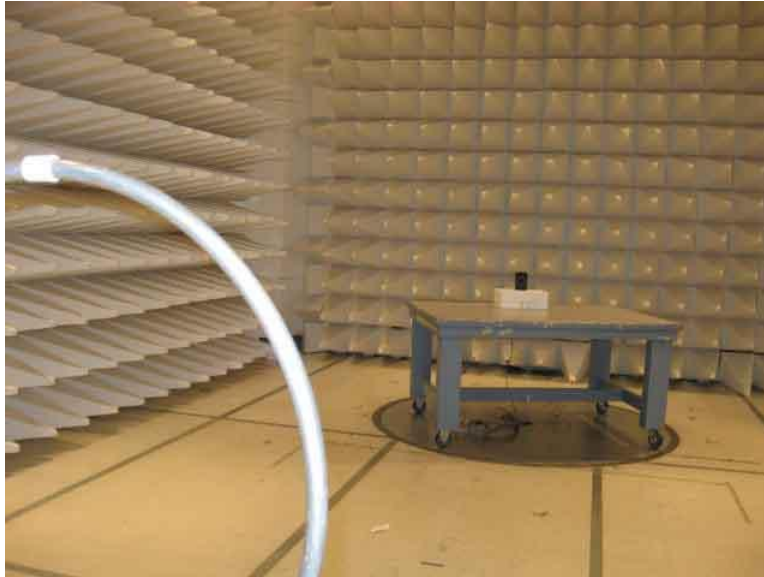
Test Distance: 3 Meters

#	Freq MHz	Rdng dB μ V	T1 dB	T2 dB	T3 dB	dB	Dist Table	Corr dB μ V/m	Spec dB μ V/m	Margin dB	Polar Ant
1	124.970k	64.4	+0.0	+0.0	+11.0		-80.0	-4.6	25.7 8800	-30.3	Paral 109
2	125.005k	61.4	+0.0	+0.0	+11.0		-80.0 -5	-7.6	25.7 8800	-33.3	Perpe 109
3	125.000k	54.1	+0.0	+0.0	+11.0		-80.0 172	-14.9	25.7 8805	-40.6	Paral 109
4	124.810k	43.3	+0.0	+0.0	+11.1		-80.0 -5	-25.6	25.7 8805	-51.3	Perpe 109
5	13.560M	61.6	+0.1	+0.2	+10.8		-40.0	32.7	84.0 8800	-51.3	Perpe 109
6	13.560M	60.8	+0.1	+0.2	+10.8		-40.0 -5	31.9	84.0 8800	-52.1	Paral 109
7	13.560M	53.8	+0.1	+0.2	+10.8		-40.0	24.9	84.0 8805	-59.1	Paral 109
8	13.560M	52.1	+0.1	+0.2	+10.8		-40.0	23.2	84.0 8805	-60.8	Perpe 109

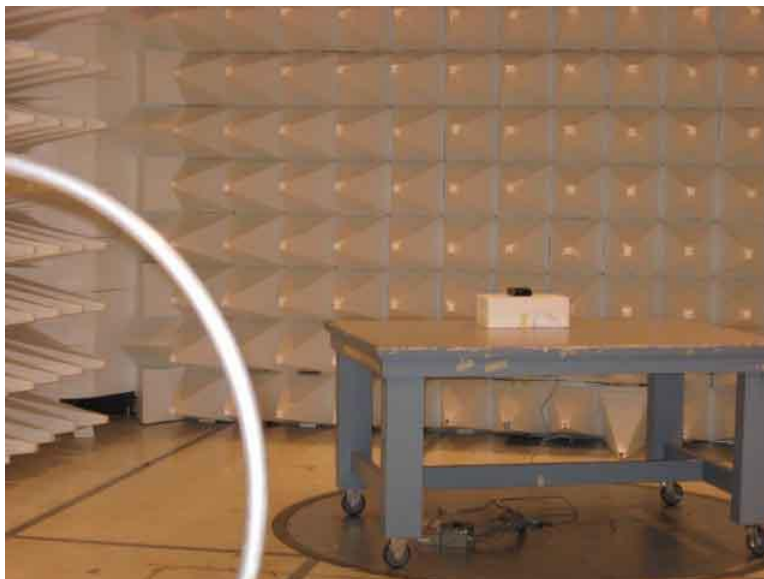
CKC Laboratories, Inc. Date: 12/15/2011 Time: 12:53:25 idOnDemand WO#: 91345 Model: 8800 SN: None
15.225 Carrier and Spurious Emissions (13.110-14.010 MHz Transmitter) Test Distance: 3 Meters Sequence#: 24
Ext ATTN: 0 dB



Test Setup Photos



TOUCHSECURE READER 8800



TOUCHSECURE READER / PROGRAMMER 8805

FCC 2.1049: -20dBc Occupied Bandwidth & Emission Mask

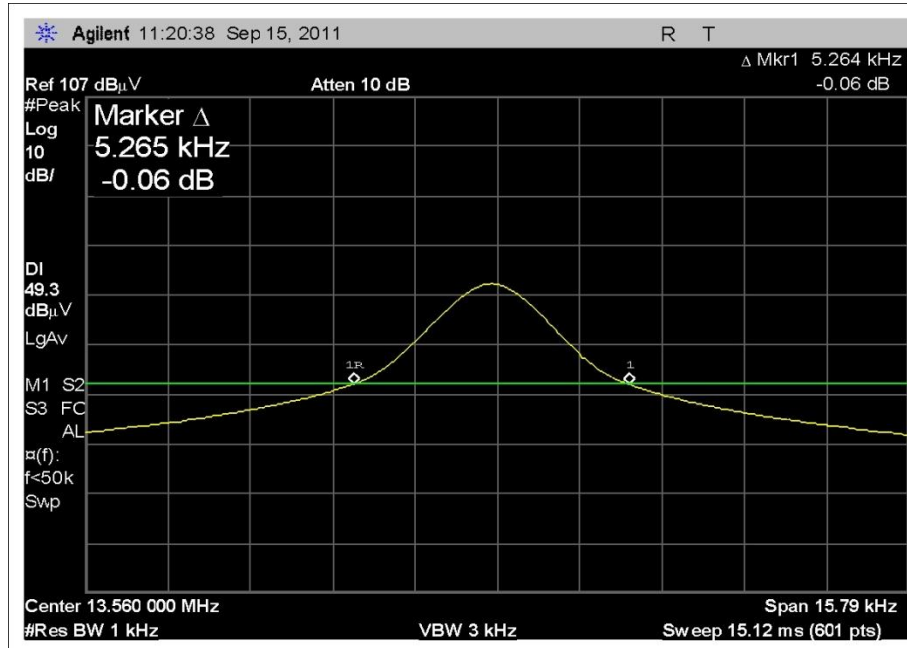
Test Conditions / Setup

Spurious Radiated Emissions. .09-30MHz. Highest generated frequency in the device is 48MHz.
 Temperature: 18.6° C, Humidity: 32% & Atmospheric Pressure: 1022mbar
 Transmit Frequency: 13.56MHz Modulated & 125kHz Modulated.
 The EUT is powered by the laptop's USB power. The laptop is located outside the test chamber.

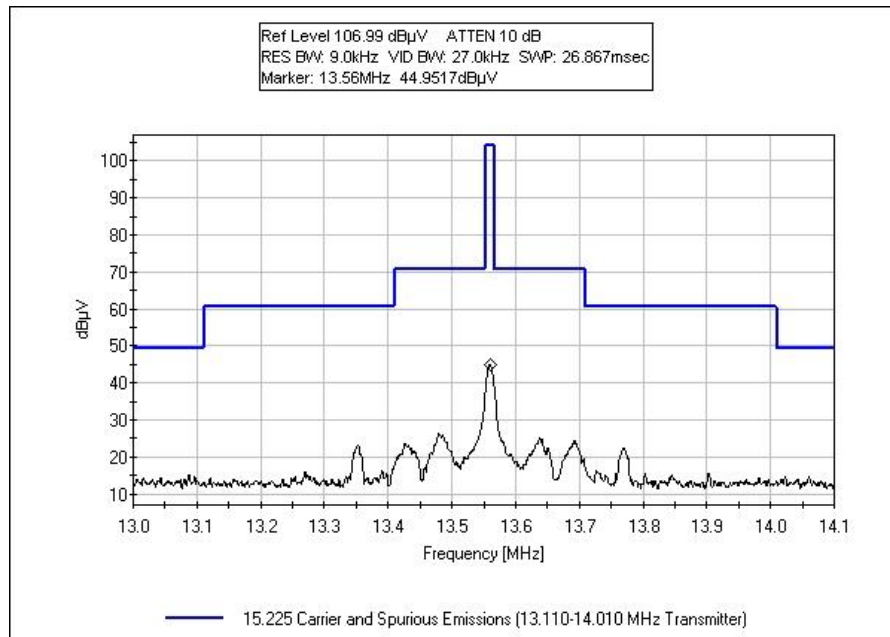
Engineer Name: A. Brar

Test Equipment					
Asset/Serial #	Description	Model	Manufacturer	Cal Date	Cal Due
AN02668	Spectrum Analyzer	E4446A	Agilent	2/23/2011	2/23/2013
ANP05300	Cable	RG214/U	Pasternack	3/7/2011	3/7/2013
ANP05440	Cable		Pasternack	3/7/2011	3/7/2013
AN00432	Loop Antenna	6502	EMCO	3/31/2011	3/31/2013

Test Plots

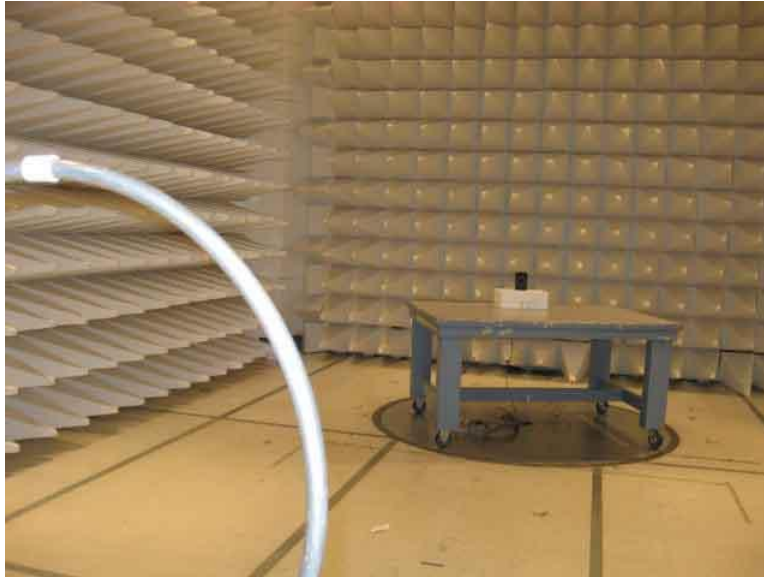


13.56MHz -20dB Occupied Bandwidth

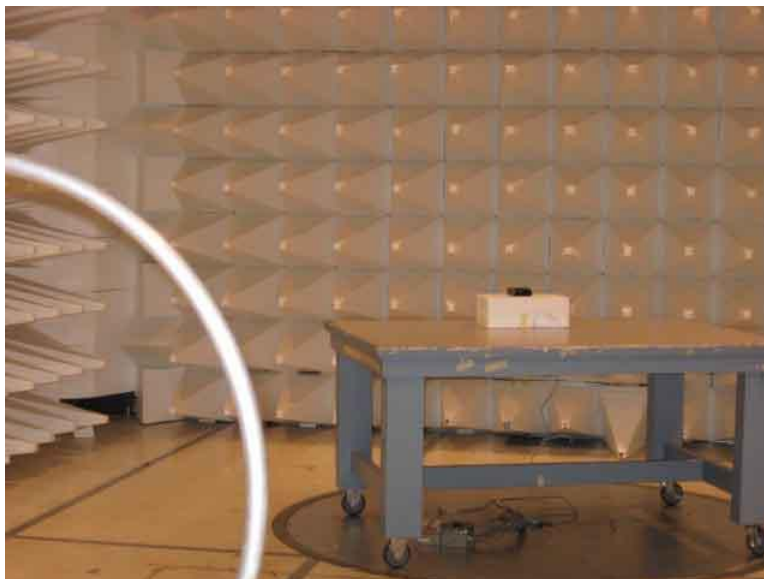


13.56MHz Emissions Mask

Test Setup Photos



TOUCHSECURE READER 8800



TOUCHSECURE READER / PROGRAMMER 8805

FCC 15.225(d) Field Strength of Spurious Emissions

Test Data Sheets

Test Location: CKC Laboratories, Inc. • 1120 Fulton Place. • Fremont, CA 94539 • (510) 249-1170

Customer: **idOnDemand**
 Specification: **15.225 Carrier and Spurious Emissions (13.110-14.010 MHz Transmitter)**
 Work Order #: **91345** Date: 12/9/2011
 Test Type: **Maximized Emissions** Time: 14:34:24
 Equipment: **TouchSecure Reader** Sequence#: 23
 Manufacturer: **idOnDemand** Tested By: A Brar
 Model: 8800
 S/N: None

Test Equipment:

ID	Asset #	Description	Model	Calibration Date	Cal Due Date
	AN02668	Spectrum Analyzer	E4446A	2/23/2011	2/23/2013
T1	ANP05300	Cable	RG214/U	3/7/2011	3/7/2013
T2	ANP05440	Cable		3/7/2011	3/7/2013
T3	AN00432	Loop Antenna	6502	3/31/2011	3/31/2013

Equipment Under Test (* = EUT):

Function	Manufacturer	Model #	S/N
TouchSecure Reader*	idOnDemand	8800	None

Support Devices:

Function	Manufacturer	Model #	S/N
Wiegand Control Box	HID	83000BKE	None
DC Power Supply	Protek	3006B	AG4070

Test Conditions / Notes:

Spurious Radiated Emissions. .09-30MHz. Highest generated frequency in the device is 48MHz.
 Temperature: 18.6° C, Humidity: 32% & Atmospheric Pressure: 1022mbar
 Transmit Frequency: 13.56MHz Modulated & 125kHz Modulated.
 The EUT is powered by the laptop's USB power. The laptop is located outside the test chamber.
 2.1057(a)(1) is covered by this data sheet.

Ext Attn: 0 dB

Measurement Data:

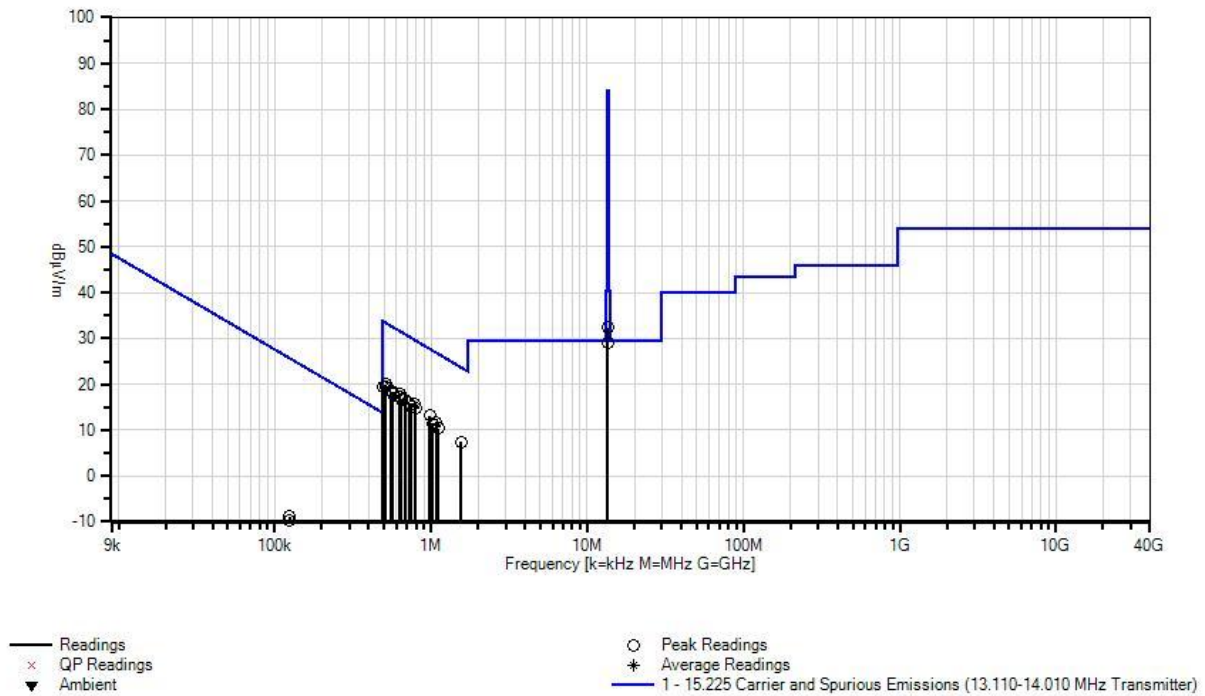
Reading listed by margin.

Test Distance: 5 Meters

#	Freq MHz	Rdng dBμV	T1 dB	T2 dB	T3 dB	dB	Dist Table	Corr dBμV/m	Spec dBμV/m	Margin dB	Polar Ant
1	511.691k	40.0	+0.0	+0.0	+11.1		-31.1 -5	20.0	33.4	-13.4	Perpe 110
2	628.771k	37.7	+0.0	+0.0	+11.4		-31.1 -5	18.0	31.6	-13.6	Perpe 110
3	513.782k	39.5	+0.0	+0.0	+11.1		-31.1 -5	19.5	33.4	-13.9	Paral 110
4	783.483k	35.3	+0.0	+0.0	+11.4		-31.1 -5	15.6	29.7	-14.1	Paral 110
5	559.778k	38.4	+0.0	+0.0	+11.2		-31.1 -5	18.5	32.6	-14.1	Paral 110

6	570.231k	38.2	+0.0	+0.0	+11.2	-31.1 -5	18.3	32.5	-14.2	Paral 110
7	490.784k	39.5	+0.0	+0.0	+11.1	-31.1 -5	19.5	33.8	-14.3	Perpe 110
8	676.857k	36.3	+0.0	+0.0	+11.5	-31.1 -5	16.7	31.0	-14.3	Paral 110
9	632.952k	37.0	+0.0	+0.0	+11.4	-31.1 -5	17.3	31.6	-14.3	Paral 110
10	722.852k	35.6	+0.0	+0.0	+11.5	-31.1 -5	16.0	30.4	-14.4	Paral 110
11	622.499k	37.0	+0.0	+0.0	+11.3	-31.1 -5	17.2	31.7	-14.5	Paral 110
12	645.496k	36.5	+0.0	+0.0	+11.4	-31.1 -5	16.8	31.4	-14.6	Paral 110
13	566.050k	37.7	+0.0	+0.0	+11.2	-31.1 -5	17.8	32.5	-14.7	Paral 110
14	977.918k	32.7	+0.0	+0.0	+11.5	-31.1 -5	13.1	27.8	-14.7	Perpe 110
15	791.846k	34.5	+0.0	+0.0	+11.4	-31.1 -5	14.8	29.6	-14.8	Perpe 110
16	745.850k	34.8	+0.0	+0.0	+11.5	-31.1 -5	15.2	30.1	-14.9	Perpe 110
17	1.082M	31.4	+0.0	+0.0	+11.5	-31.1 -5	11.8	26.9	-15.1	Perpe 110
18	1.022M	31.0	+0.0	+0.0	+11.5	-31.1 -5	11.4	27.4	-16.0	Perpe 110
19	1.559M	27.1	+0.0	+0.1	+11.4	-31.1 -5	7.5	23.7	-16.2	Perpe 110
20	1.116M	29.9	+0.0	+0.0	+11.5	-31.1 -5	10.3	26.6	-16.3	Perpe 110
21	124.999k	51.2	+0.0	+0.0	+11.0	-71.1 365	-8.9	25.7	-34.6	Paral 110
22	124.999k	50.4	+0.0	+0.0	+11.0	-71.1 -5	-9.7	25.7	-35.4	Perpe 110
23	13.560M	52.3	+0.1	+0.2	+10.8	-31.1 365	32.3	84.0	-51.7	Perpe 110
24	13.560M	49.0	+0.1	+0.2	+10.8	-31.1 -5	29.0	84.0	-55.0	Paral 110

CKC Laboratories, Inc. Date: 12/9/2011 Time: 14:34:24 idOnDemand WO#: 91345 Model: 8800 SN: None
 15.225 Carrier and Spurious Emissions (13.110-14.010 MHz Transmitter) Test Distance: 5 Meters Sequence#: 23
 Ext ATTN: 0 dB



Test Location: CKC Laboratories, Inc. • 1120 Fulton Place. • Fremont, CA 94539 • (510) 249-1170

Customer: **idOnDemand**
 Specification: **15.225 Carrier and Spurious Emissions (13.110-14.010 MHz Transmitter)**
 Work Order #: **91345** Date: 12/9/2011
 Test Type: **Maximized Emissions** Time: 9:08:57 AM
 Equipment: **TouchSecure Reader** Sequence#: 14
 Manufacturer: **idOnDemand** Tested By: A Brar
 Model: 8800
 S/N: None

Test Equipment:

ID	Asset #	Description	Model	Calibration Date	Cal Due Date
	AN02668	Spectrum Analyzer	E4446A	2/23/2011	2/23/2013
T1	ANP05299	Cable	RG214	3/6/2011	3/6/2013
T2	ANP05300	Cable	RG214/U	3/7/2011	3/7/2013
T3	ANP05440	Cable		3/7/2011	3/7/2013
T4	AN00852	Biconilog Antenna	CBL 6111C	11/16/2010	11/16/2012
T5	AN00730	Preamplifier		1/31/2011	1/31/2013

Equipment Under Test (* = EUT):

Function	Manufacturer	Model #	S/N
TouchSecure Reader*	idOnDemand	8800	None

Support Devices:

Function	Manufacturer	Model #	S/N
DC Power Supply	Protek	3006B	AG4070
Wiegand Control Box	HID	83000BKE	None

Test Conditions / Notes:

Radiated Emissions. 30-1000MHz. Highest generated frequency in the device is 48MHz.
 Temperature: 18.6° C, Humidity: 32% & Atmospheric Pressure: 1022mbar
 Transmit Frequency: 13.56MHz Modulated & 125kHz Modulated.
 The EUT is powered by a DC Power Supply located outside the test chamber along with the control box, which is used for termination purposes only.
 2.1057(a)(1) is covered by this data sheet.

Ext Attn: 0 dB

Measurement Data:

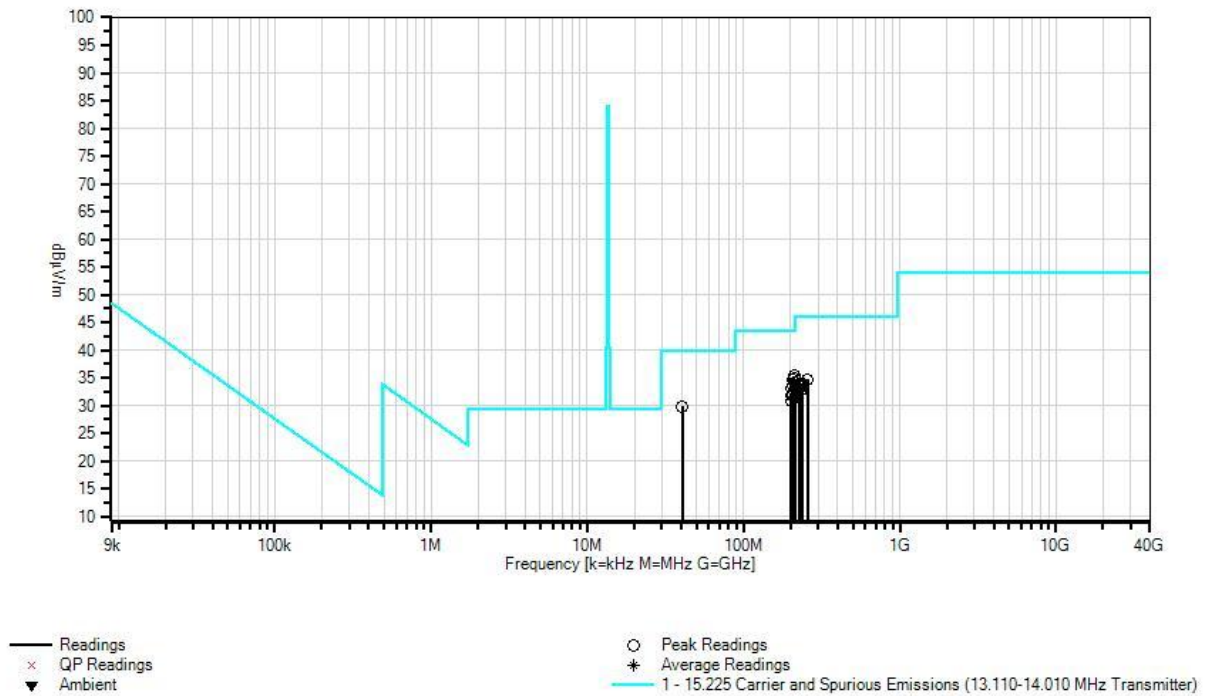
Reading listed by margin.

Test Distance: 3 Meters

#	Freq	Rdng	T1 T5	T2	T3	T4	Dist	Corr	Spec	Margin	Polar
	MHz	dBμV	dB	dB	dB	dB	Table	dBμV/m	dBμV/m	dB	Ant
1	210.062M	51.6	+0.1 -27.4	+0.4	+0.8	+9.8	+0.0 -5	35.3	43.5	-8.2	Vert 129
2	210.062M	51.2	+0.1 -27.4	+0.4	+0.8	+9.8	+0.0 365	34.9	43.5	-8.6	Horiz 130
3	208.020M	51.2	+0.1 -27.4	+0.4	+0.8	+9.6	+0.0 -5	34.7	43.5	-8.8	Vert 129
4	206.098M	51.2	+0.1 -27.4	+0.4	+0.8	+9.5	+0.0 -5	34.6	43.5	-8.9	Vert 129
5	212.104M	50.4	+0.1 -27.4	+0.4	+0.8	+9.9	+0.0 365	34.2	43.5	-9.3	Horiz 130
6	212.104M	50.2	+0.1 -27.4	+0.4	+0.8	+9.9	+0.0 -5	34.0	43.5	-9.5	Vert 129

7	208.020M	50.0	+0.1 -27.4	+0.4	+0.8	+9.6	+0.0 365	33.5	43.5	-10.0	Horiz 130
8	40.648M	43.3	+0.0 -27.5	+0.2	+0.3	+13.5	+0.0 -5	29.8	40.0	-10.2	Vert 129
9	204.056M	49.8	+0.1 -27.4	+0.4	+0.8	+9.3	+0.0 -5	33.0	43.5	-10.5	Vert 129
10	214.026M	49.1	+0.1 -27.4	+0.4	+0.8	+10.0	+0.0 -5	33.0	43.5	-10.5	Vert 129
11	214.146M	49.0	+0.1 -27.4	+0.4	+0.8	+10.0	+0.0 365	32.9	43.5	-10.6	Horiz 130
12	257.630M	48.2	+0.1 -27.4	+0.4	+0.9	+12.5	+0.0 365	34.7	46.0	-11.3	Horiz 130
13	206.098M	48.7	+0.1 -27.4	+0.4	+0.8	+9.5	+0.0 365	32.1	43.5	-11.4	Horiz 130
14	202.134M	48.7	+0.1 -27.5	+0.4	+0.8	+9.2	+0.0 -5	31.7	43.5	-11.8	Vert 129
15	228.080M	49.0	+0.1 -27.4	+0.4	+0.8	+11.0	+0.0 -5	33.9	46.0	-12.1	Vert 129
16	238.050M	48.2	+0.1 -27.5	+0.4	+0.9	+11.7	+0.0 365	33.8	46.0	-12.2	Horiz 130
17	236.128M	48.3	+0.1 -27.5	+0.4	+0.9	+11.5	+0.0 365	33.7	46.0	-12.3	Horiz 130
18	236.008M	47.9	+0.1 -27.5	+0.4	+0.9	+11.5	+0.0 -5	33.3	46.0	-12.7	Vert 129
19	204.056M	47.6	+0.1 -27.4	+0.4	+0.8	+9.3	+0.0 365	30.8	43.5	-12.7	Horiz 130
20	234.086M	47.6	+0.1 -27.5	+0.4	+0.9	+11.4	+0.0 365	32.9	46.0	-13.1	Horiz 130

CKC Laboratories, Inc. Date: 12/9/2011 Time: 9:08:57 AM idOnDemand WO#: 91345 Model: 8800 SN: None
15.225 Carrier and Spurious Emissions (13.110-14.010 MHz Transmitter) Test Distance: 3 Meters Sequence#: 14
Ext ATTN: 0 dB



Test Location: CKC Laboratories, Inc. • 1120 Fulton Place. • Fremont, CA 94539 • (510) 249-1170

Customer: **idOnDemand**
 Specification: **15.225 Carrier and Spurious Emissions (13.110-14.010 MHz Transmitter)**
 Work Order #: **91345** Date: 12/9/2011
 Test Type: **Maximized Emissions** Time: 13:29:40
 Equipment: **TouchSecure Reader / Programmer** Sequence#: 22
 Manufacturer: **idOnDemand** Tested By: A Brar
 Model: 8805
 S/N: None

Test Equipment:

ID	Asset #	Description	Model	Calibration Date	Cal Due Date
	AN02668	Spectrum Analyzer	E4446A	2/23/2011	2/23/2013
T1	ANP05300	Cable	RG214/U	3/7/2011	3/7/2013
T2	ANP05440	Cable		3/7/2011	3/7/2013
T3	AN00432	Loop Antenna	6502	3/31/2011	3/31/2013

Equipment Under Test (* = EUT):

Function	Manufacturer	Model #	S/N
TouchSecure Reader / Programmer*	idOnDemand	8805	None

Support Devices:

Function	Manufacturer	Model #	S/N
Laptop	Dell	Latitude E6320	None
Power Adapter	Dell	FA90PM111	None

Test Conditions / Notes:

Spurious Radiated Emissions. .09-30MHz. Highest generated frequency in the device is 48MHz.
 Temperature: 18.6° C, Humidity: 32% & Atmospheric Pressure: 1022mbar
 Transmit Frequency: 13.56MHz Modulated & 125kHz Modulated.
 The EUT is powered by the laptop's USB power. The laptop is located outside the test chamber.
 2.1057(a)(1) is covered by this data sheet.

Ext Attn: 0 dB

Measurement Data:

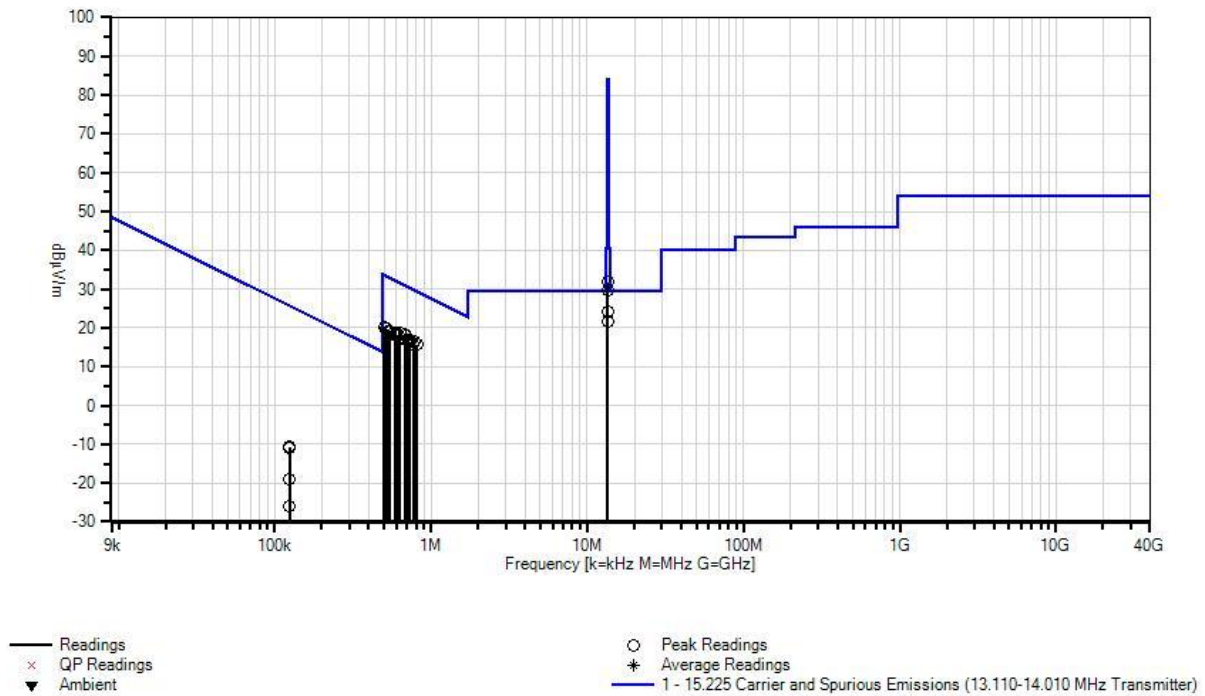
Reading listed by margin.

Test Distance: 5 Meters

#	Freq MHz	Rdng dBμV	T1 dB	T2 dB	T3 dB	dB	Dist Table	Corr dBμV/m	Spec dBμV/m	Margin dB	Polar Ant
1	681.038k	37.9	+0.0	+0.0	+11.5		-31.1 -5	18.3	30.9	-12.6	Paral 110
2	693.583k	37.6	+0.0	+0.0	+11.5		-31.1 -5	18.0	30.8	-12.8	Paral 110
3	632.952k	38.3	+0.0	+0.0	+11.4		-31.1 -5	18.6	31.6	-13.0	Paral 110
4	779.301k	36.3	+0.0	+0.0	+11.4		-31.1 -5	16.6	29.7	-13.1	Perpe 110
5	593.229k	38.6	+0.0	+0.0	+11.3		-31.1 -5	18.8	32.1	-13.3	Perpe 110
6	503.329k	40.2	+0.0	+0.0	+11.1		-31.1 -5	20.2	33.6	-13.4	Paral 110
7	520.054k	39.8	+0.0	+0.0	+11.1		-31.1 -5	19.8	33.3	-13.5	Paral 110
8	716.580k	36.6	+0.0	+0.0	+11.5		-31.1 -5	17.0	30.5	-13.5	Perpe 110

9	626.680k	37.7	+0.0	+0.0	+11.4	-31.1 -5	18.0	31.6	-13.6	Perpe 110
10	812.753k	35.4	+0.0	+0.0	+11.4	-31.1 -5	15.7	29.4	-13.7	Paral 110
11	543.052k	39.1	+0.0	+0.0	+11.2	-31.1 -5	19.2	32.9	-13.7	Perpe 110
12	601.592k	38.1	+0.0	+0.0	+11.3	-31.1 -5	18.3	32.0	-13.7	Perpe 110
13	687.310k	36.6	+0.0	+0.0	+11.5	-31.1 -5	17.0	30.8	-13.8	Paral 110
14	733.306k	36.1	+0.0	+0.0	+11.5	-31.1 -5	16.5	30.3	-13.8	Paral 110
15	620.408k	37.6	+0.0	+0.0	+11.3	-31.1 -5	17.8	31.7	-13.9	Perpe 110
16	687.310k	36.5	+0.0	+0.0	+11.5	-31.1 -5	16.9	30.8	-13.9	Perpe 110
17	720.762k	36.0	+0.0	+0.0	+11.5	-31.1 -5	16.4	30.4	-14.0	Paral 110
18	768.848k	35.6	+0.0	+0.0	+11.4	-31.1 -5	15.9	29.9	-14.0	Perpe 110
19	524.236k	39.0	+0.0	+0.0	+11.2	-31.1 -5	19.1	33.2	-14.1	Perpe 110
20	591.138k	37.8	+0.0	+0.0	+11.3	-31.1 -5	18.0	32.2	-14.2	Paral 110
21	125.000k	49.4	+0.0	+0.0	+11.0	-71.1 356	-10.7	25.7	-36.4	Perpe 110
22	125.005k	49.2	+0.0	+0.0	+11.0	-71.1 294	-10.9	25.7 EUT standing up vertically.	-36.6	Paral 110
23	124.988k	41.0	+0.0	+0.0	+11.0	-71.1	-19.1	25.7	-44.8	Paral 110
24	125.000k	34.1	+0.0	+0.0	+11.0	-71.1 -5	-26.0	25.7	-51.7	Perpe 110
25	13.560M	51.8	+0.1	+0.2	+10.8	-31.1 -5	31.8	84.0	-52.2	Perpe 110
26	13.560M	49.8	+0.1	+0.2	+10.8	-31.1 294	29.8	84.0 EUT standing up vertically.	-54.2	Paral 110
27	13.560M	44.2	+0.1	+0.2	+10.8	-31.1	24.2	84.0	-59.8	Perpe 110
28	13.560M	41.7	+0.1	+0.2	+10.8	-31.1 -5	21.7	84.0	-62.3	Paral 110

CKC Laboratories, Inc. Date: 12/9/2011 Time: 13:29:40 idOnDemand WO#: 91345 Model: 8805 SN: None
 15.225 Carrier and Spurious Emissions (13.110-14.010 MHz Transmitter) Test Distance: 5 Meters Sequence#: 22
 Ext ATTN: 0 dB



Test Location: CKC Laboratories, Inc. • 1120 Fulton Place. • Fremont, CA 94539 • (510) 249-1170

Customer: **idOnDemand**
 Specification: **15.225 Carrier and Spurious Emissions (13.110-14.010 MHz Transmitter)**
 Work Order #: **91345** Date: 12/9/2011
 Test Type: **Maximized Emissions** Time: 11:29:33
 Equipment: **TouchSecure Reader / Programmer** Sequence#: 17
 Manufacturer: **idOnDemand** Tested By: A Brar
 Model: 8805
 S/N: None

Test Equipment:

ID	Asset #	Description	Model	Calibration Date	Cal Due Date
	AN02668	Spectrum Analyzer	E4446A	2/23/2011	2/23/2013
T1	ANP05299	Cable	RG214	3/6/2011	3/6/2013
T2	ANP05300	Cable	RG214/U	3/7/2011	3/7/2013
T3	ANP05440	Cable		3/7/2011	3/7/2013
T4	AN00852	Biconilog Antenna	CBL 6111C	11/16/2010	11/16/2012
T5	AN00730	Preamplifier		1/31/2011	1/31/2013

Equipment Under Test (* = EUT):

Function	Manufacturer	Model #	S/N
TouchSecure Reader / Programmer*	idOnDemand	8805	None

Support Devices:

Function	Manufacturer	Model #	S/N
Laptop	Dell	Latitude E6320	None
Power Adapter	Dell	FA90PM111	None

Test Conditions / Notes:

Radiated Emissions. 30-1000MHz. Highest generated frequency in the device is 48MHz.
 Temperature: 18.6° C, Humidity: 32% & Atmospheric Pressure: 1022mbar
 Transmit Frequency: 13.56MHz Modulated & 125kHz Modulated.
 The EUT is powered by the laptop's USB power. The laptop is located outside the test chamber.
 2.1057(a)(1) is covered by this data sheet.

Ext Attn: 0 dB

Measurement Data:

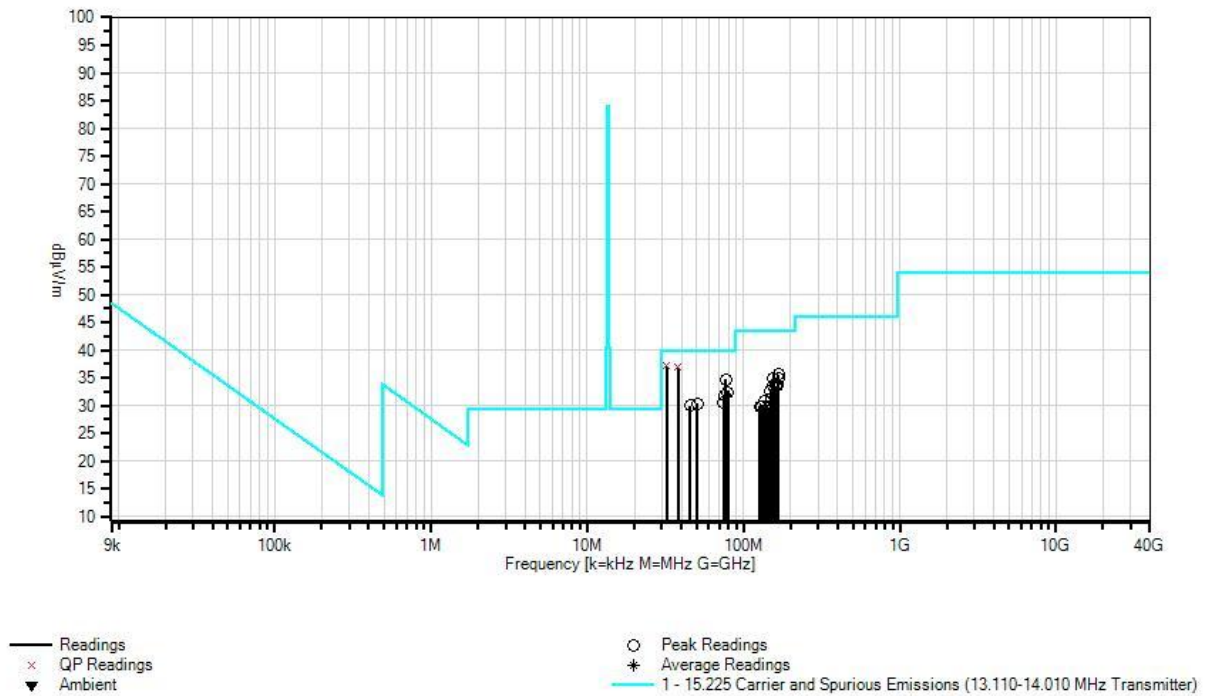
Reading listed by margin.

Test Distance: 3 Meters

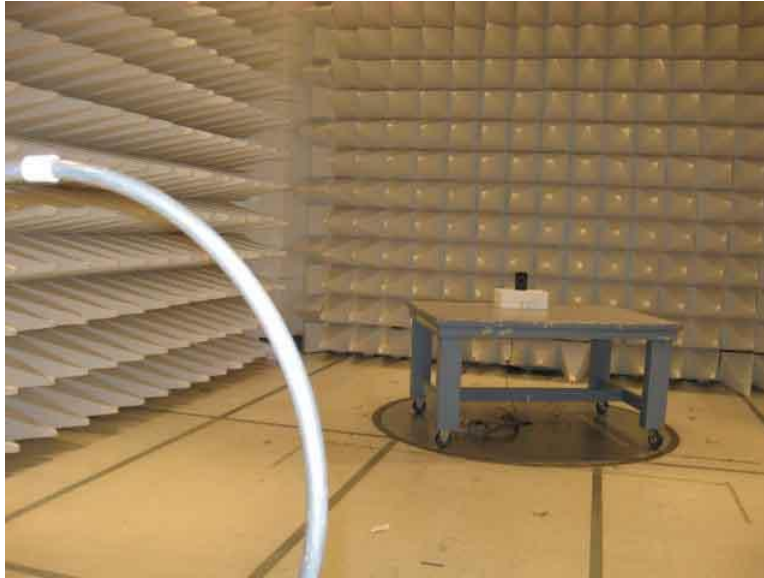
#	Freq	Rdng	T1 T5	T2	T3	T4	Dist	Corr	Spec	Margin	Polar
	MHz	dBμV	dB	dB	dB	dB	Table	dBμV/m	dBμV/m	dB	Ant
1	32.059M	46.3	+0.0	+0.1	+0.3	+18.0	+0.0	37.1	40.0	-2.9	Horiz
QP			-27.6				-5				101
^	32.059M	50.6	+0.0	+0.1	+0.3	+18.0	+0.0	41.4	40.0	+1.4	Horiz
			-27.6				-5				101
3	38.227M	48.6	+0.0	+0.2	+0.3	+15.4	+0.0	36.9	40.0	-3.1	Horiz
QP			-27.6				5				102
^	38.227M	52.4	+0.0	+0.2	+0.3	+15.4	+0.0	40.7	40.0	+0.7	Horiz
			-27.6				5				102
5	76.784M	54.3	+0.0	+0.2	+0.5	+7.3	+0.0	34.7	40.0	-5.3	Vert
			-27.6				-5				129
6	79.379M	51.6	+0.0	+0.2	+0.5	+7.7	+0.0	32.4	40.0	-7.6	Vert
			-27.6				-5				129

7	167.540M	52.1	+0.1 -27.5	+0.3	+0.7	+9.9	+0.0 365	35.6	43.5	-7.9	Horiz 130
8	75.519M	51.6	+0.0 -27.5	+0.2	+0.5	+7.1	+0.0 -5	31.9	40.0	-8.1	Vert 129
9	155.768M	50.4	+0.1 -27.4	+0.3	+0.7	+10.9	+0.0 365	35.0	43.5	-8.5	Horiz 130
10	167.780M	51.5	+0.1 -27.5	+0.3	+0.7	+9.9	+0.0 -5	35.0	43.5	-8.5	Vert 129
11	74.787M	50.3	+0.0 -27.5	+0.2	+0.5	+7.0	+0.0 -5	30.5	40.0	-9.5	Vert 129
12	50.763M	48.5	+0.0 -27.5	+0.2	+0.4	+8.7	+0.0 -5	30.3	40.0	-9.7	Vert 129
13	163.095M	49.6	+0.1 -27.5	+0.3	+0.7	+10.4	+0.0 365	33.6	43.5	-9.9	Horiz 130
14	155.768M	49.0	+0.1 -27.4	+0.3	+0.7	+10.9	+0.0 -5	33.6	43.5	-9.9	Vert 129
15	45.306M	45.8	+0.0 -27.5	+0.2	+0.4	+11.1	+0.0 -5	30.0	40.0	-10.0	Vert 129
16	160.693M	49.2	+0.1 -27.4	+0.3	+0.7	+10.6	+0.0 365	33.5	43.5	-10.0	Horiz 130
17	148.681M	47.7	+0.1 -27.4	+0.3	+0.7	+11.2	+0.0 365	32.6	43.5	-10.9	Horiz 130
18	151.083M	46.4	+0.1 -27.4	+0.3	+0.7	+11.1	+0.0 365	31.2	43.5	-12.3	Horiz 130
19	136.789M	45.7	+0.1 -27.5	+0.3	+0.6	+11.6	+0.0 365	30.8	43.5	-12.7	Horiz 130
20	127.300M	44.6	+0.1 -27.4	+0.3	+0.6	+11.6	+0.0 365	29.8	43.5	-13.7	Horiz 130
21	131.744M	44.7	+0.1 -27.5	+0.3	+0.6	+11.6	+0.0 365	29.8	43.5	-13.7	Horiz 130
22	143.756M	44.7	+0.1 -27.5	+0.3	+0.7	+11.4	+0.0 365	29.7	43.5	-13.8	Horiz 130

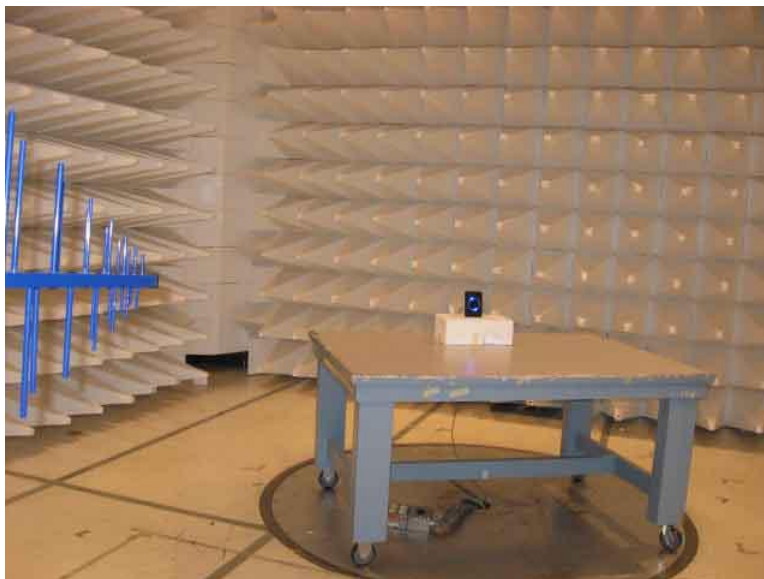
CKC Laboratories, Inc. Date: 12/9/2011 Time: 11:29:33 idOnDemand WO#: 91345 Model: 8805 SN: None
 15.225 Carrier and Spurious Emissions (13.110-14.010 MHz Transmitter) Test Distance: 3 Meters Sequence#: 17
 Ext ATTN: 0 dB



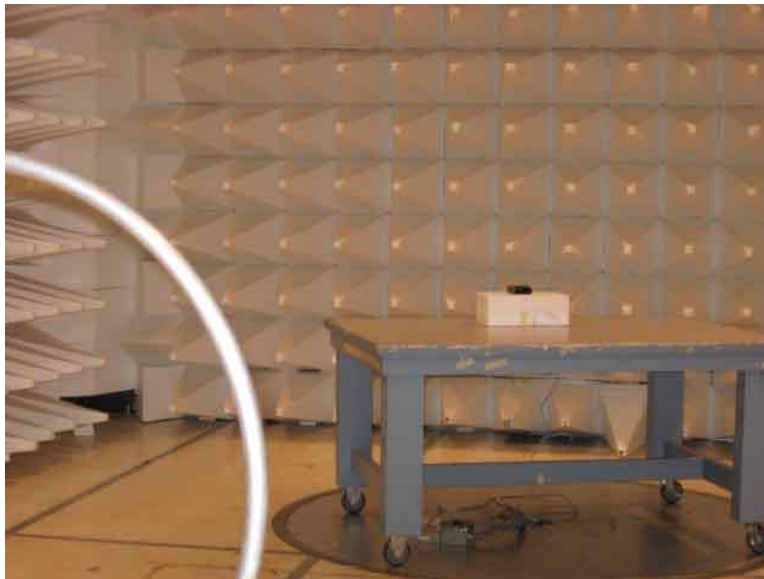
Test Setup Photos



TOUCHSECURE READER 8800: 0.09 – 30MHz



TOUCHSECURE READER 8800: 30-1000MHz



TOUCHSECURE READER / PROGRAMMER: 0.09 - 30MHz



TOUCHSECURE READER / PROGRAMMER: 30-1000MHz

FCC 15.225(d) Frequency Stability

Test Conditions / Setup

Test Conditions model 8800:

FCC 15.225e. 1kHz RBW / 3kHz VBW. EUT is running at 13.56MHz.
 15.225E Frequency Stability Testing. 13.56MHz.
 Highest generated frequency in the device is 48MHz.
 Nominal Temperature: 18.6° C, Humidity: 32% & Atmospheric Pressure: 1022mbar
 Transmit Frequency: 13.56MHz Modulated & 125kHz Modulated.
 The EUT is powered by a variable dc power source located outside the test chamber.

Test Conditions model 8805:

FCC 15.225e. 1kHz RBW / 3kHz VBW. EUT is running at 13.56MHz.
 15.225E Frequency Stability Testing. 13.56MHz.
 Highest generated frequency in the device is 48MHz.
 Nominal Temperature: 18.6° C, Humidity: 32% & Atmospheric Pressure: 1022mbar
 Transmit Frequency: 13.56MHz Modulated & 125kHz Modulated.
 The EUT is powered by a variable dc power source located outside the test chamber.

Supporting Devices for model 8800 & 8805:

Description	Manufacture	Model	SN
DC Power Supply	Tektronix	CPS250	CPS-250TW18988
DC Power Supply	Tenema	72-6610	1002222

Engineer Name: A. Brar

Test Equipment

Asset/Serial #	Description	Model	Manufacturer	Cal Date	Cal Due
02660	Spectrum Analyzer	E4446A	Agilent	11/3/11	11/3/13
02721	Temperature Chamber	SM-8C	Thermatron	6/2/10	6/2/12
P06024	Near Field Probe	None	CKC	6/16/10	6/16/12
P02131	DMM	DMM914	Fluke	9/9/11	9/9/13
P05300	Cable	RG214/U	Pasternack	3/7/11	3/7/13
P05440	Cable	RG214/U	Pasternack	3/7/11	3/7/13

Test Data

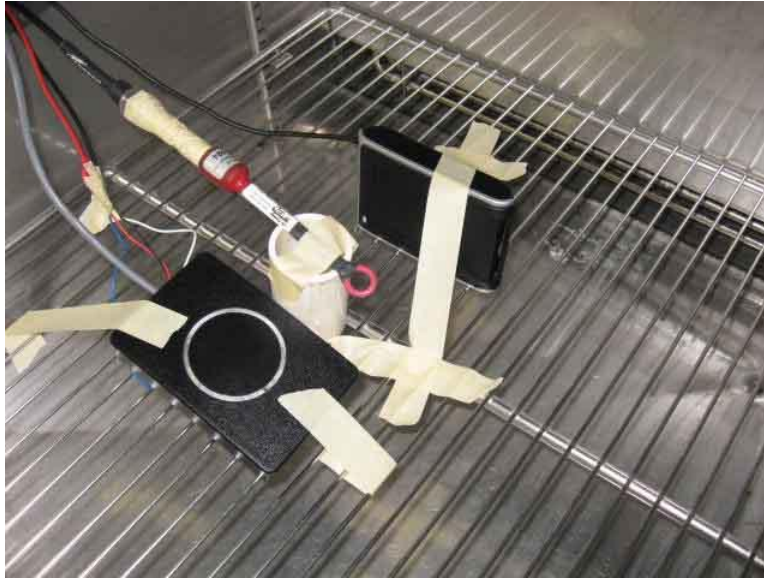
Test Results: Model 8800

Temperature °C	Voltage (V DC)	Fundamental Frequency Reading (MHz)	+/-0.01% Range (MHz)	Results
-20	10.2	13.560	13.5586 – 13.5613	Pass
-20	13.8	13.560	13.5586 – 13.5613	Pass
-10	10.2	13.560	13.5586 – 13.5613	Pass
-10	13.8	13.560	13.5586 – 13.5613	Pass
0	10.2	13.560	13.5586 – 13.5613	Pass
0	13.8	13.560	13.5586 – 13.5613	Pass
10	10.2	13.560	13.5586 – 13.5613	Pass
10	13.8	13.560	13.5586 – 13.5613	Pass
20	10.2	13.560	13.5586 – 13.5613	Pass
20	13.8	13.560	13.5586 – 13.5613	Pass
30	10.2	13.560	13.5586 – 13.5613	Pass
30	13.8	13.560	13.5586 – 13.5613	Pass
40	10.2	13.560	13.5586 – 13.5613	Pass
40	13.8	13.560	13.5586 – 13.5613	Pass
50	10.2	13.560	13.5586 – 13.5613	Pass
50	13.8	13.560	13.5586 – 13.5613	Pass

Test Results: Model 8805

Temperature °C	Voltage (V DC)	Fundamental Frequency Reading (MHz)	+/-0.01% Range (MHz)	Results
-20	4.25	13.560	13.5586 – 13.5613	Pass
-20	5.75	13.560	13.5586 – 13.5613	Pass
-10	4.25	13.560	13.5586 – 13.5613	Pass
-10	5.75	13.560	13.5586 – 13.5613	Pass
0	4.25	13.560	13.5586 – 13.5613	Pass
0	5.75	13.560	13.5586 – 13.5613	Pass
10	4.25	13.560	13.5586 – 13.5613	Pass
10	5.75	13.560	13.5586 – 13.5613	Pass
20	4.25	13.560	13.5586 – 13.5613	Pass
20	5.75	13.560	13.5586 – 13.5613	Pass
30	4.25	13.560	13.5586 – 13.5613	Pass
30	5.75	13.560	13.5586 – 13.5613	Pass
40	4.25	13.560	13.5586 – 13.5613	Pass
40	5.75	13.560	13.5586 – 13.5613	Pass
50	4.25	13.560	13.5586 – 13.5613	Pass
50	5.75	13.560	13.5586 – 13.5613	Pass

Test Setup Photos



RSS-210

99 % Bandwidth

Test Conditions / Setup

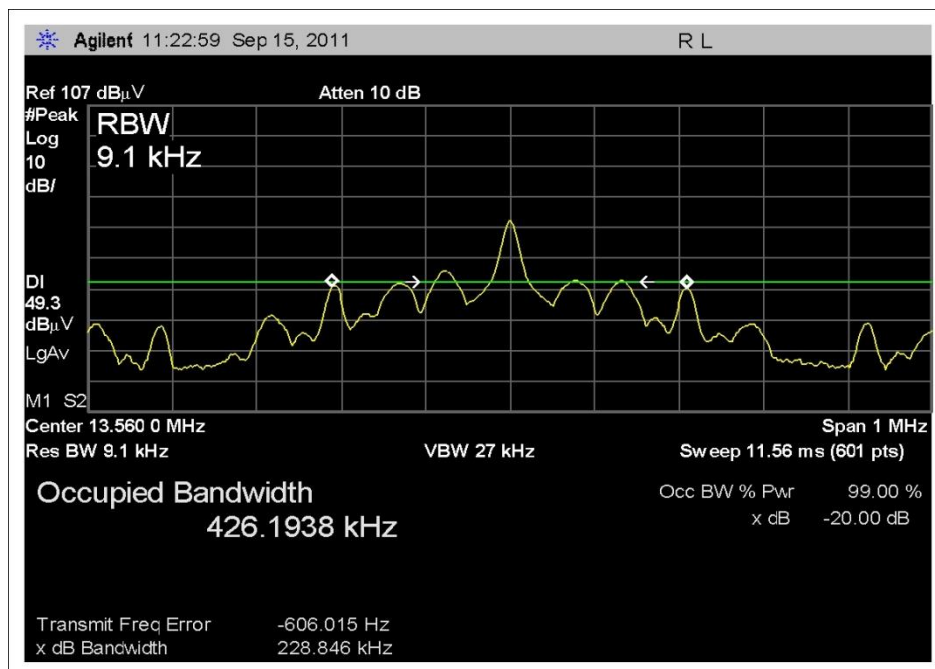
Spurious Radiated Emissions. .09-30MHz. Highest generated frequency in the device is 48MHz.
 Temperature: 18.6° C, Humidity: 32% & Atmospheric Pressure: 1022mbar
 Transmit Frequency: 13.56MHz Modulated & 125kHz Modulated.
 The EUT is powered by the laptop's USB power. The laptop is located outside the test chamber.

Engineer Name: A. Brar

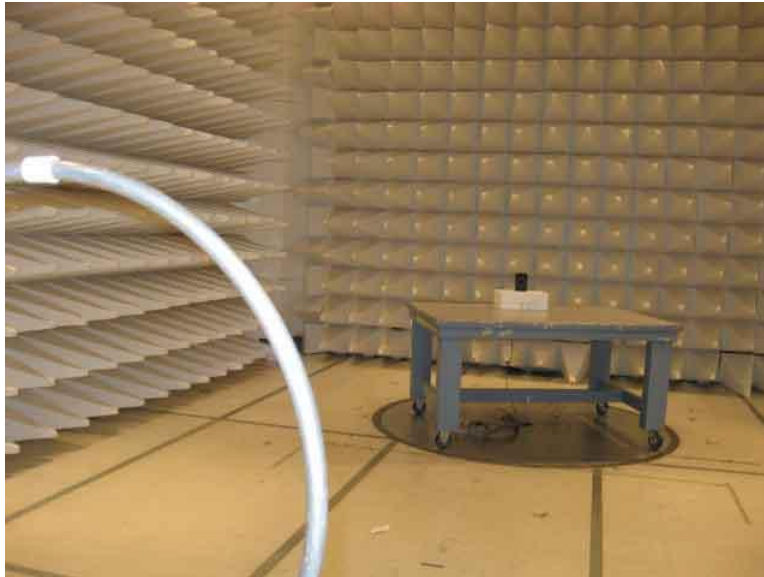
Test Equipment

Asset/Serial #	Description	Model	Manufacturer	Cal Date	Cal Due
AN02668	Spectrum Analyzer	E4446A	Agilent	2/23/2011	2/23/2013
ANP05300	Cable	RG214/U	Pasternack	3/7/2011	3/7/2013
ANP05440	Cable		Pasternack	3/7/2011	3/7/2013
AN00432	Loop Antenna	6502	EMCO	3/31/2011	3/31/2013

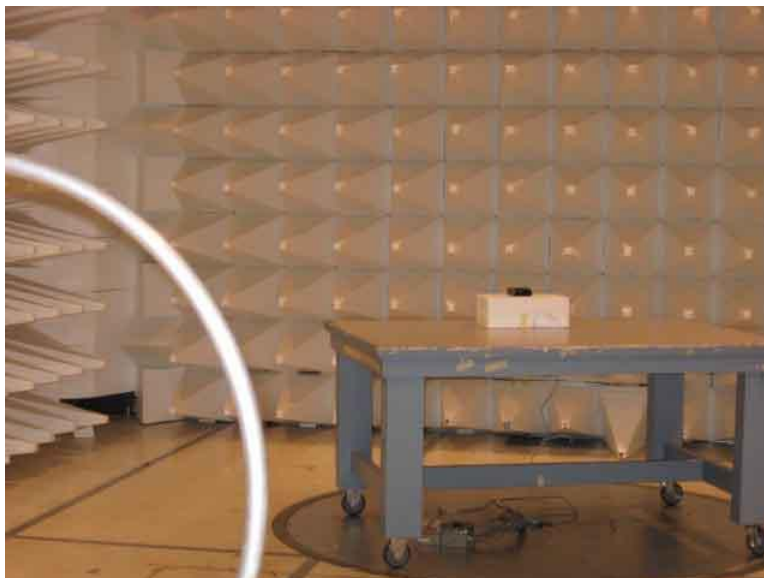
Test Plot



Test Setup Photos



TOUCHSECURE READER 8800



TOUCHSECURE READER / PROGRAMMER 8805

SUPPLEMENTAL INFORMATION

Measurement Uncertainty

Uncertainty Value	Parameter
4.73 dB	Radiated Emissions
3.34 dB	Mains Conducted Emissions
3.30 dB	Disturbance Power

The reported measurement uncertainties are calculated based on the worst case of all laboratory environments from CKC Laboratories, Inc. test sites. Only those parameters which require estimation of measurement uncertainty are reported. The reported worst case measurement uncertainty is less than the maximum values derived in CISPR 16-4-2. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of $k=2$. Compliance is deemed to occur provided measurements are below the specified limits.

Emissions Test Details

TESTING PARAMETERS

Unless otherwise indicated, the following configuration parameters are used for equipment setup: The cables were routed consistent with the typical application by varying the configuration of the test sample. Interface cables were connected to the available ports of the test unit. The effect of varying the position of the cables was investigated to find the configuration that produced maximum emissions. Cables were of the type and length specified in the individual requirements. The length of cable that produced maximum emissions was selected.

The equipment under test (EUT) was set up in a manner that represented its normal use, as shown in the setup photographs. Any special conditions required for the EUT to operate normally are identified in the comments that accompany the emissions tables.

The emissions data was taken with a spectrum analyzer or receiver. Incorporating the applicable correction factors for distance, antenna, cable loss and amplifier gain, the data was reduced as shown in the table below. The corrected data was then compared to the applicable emission limits. Preliminary and final measurements were taken in order to ensure that all emissions from the EUT were found and maximized.

CORRECTION FACTORS

The basic spectrum analyzer reading was converted using correction factors as shown in the highest emissions readings in the tables. For radiated emissions in dB μ V/m, the spectrum analyzer reading in dB μ V was corrected by using the following formula. This reading was then compared to the applicable specification limit.

SAMPLE CALCULATIONS		
	Meter reading	(dB μ V)
+	Antenna Factor	(dB)
+	Cable Loss	(dB)
-	Distance Correction	(dB)
-	Preamplifier Gain	(dB)
=	Corrected Reading	(dB μ V/m)

TEST INSTRUMENTATION AND ANALYZER SETTINGS

The test instrumentation and equipment listed were used to collect the emissions data. A spectrum analyzer or receiver was used for all measurements. Unless otherwise specified, the following table shows the measuring equipment bandwidth settings that were used in designated frequency bands. For testing emissions, an appropriate reference level and a vertical scale size of 10 dB per division were used.

MEASURING EQUIPMENT BANDWIDTH SETTINGS PER FREQUENCY RANGE			
TEST	BEGINNING FREQUENCY	ENDING FREQUENCY	BANDWIDTH SETTING
CONDUCTED EMISSIONS	150 kHz	30 MHz	9 kHz
RADIATED EMISSIONS	30 MHz	1000 MHz	120 kHz
RADIATED EMISSIONS	1000 MHz	>1 GHz	1 MHz

SPECTRUM ANALYZER/RECEIVER DETECTOR FUNCTIONS

The notes that accompany the measurements contained in the emissions tables indicate the type of detector function used to obtain the given readings. Unless otherwise noted, all readings were made in the "positive peak" detector mode. Whenever a "quasi-peak" or "average" reading was recorded, the measurement was annotated with a "QP" or an "Ave" on the appropriate rows of the data sheets. In cases where quasi-peak or average limits were employed and data exists for multiple measurement types for the same frequency then the peak measurement was retained in the report for reference, however the numbering for the affected row was removed and an arrow or carrot ("^") was placed in the far left-hand column indicating that the row above takes precedence for comparison to the limit. The following paragraphs describe in more detail the detector functions and when they were used to obtain the emissions data.

Peak

In this mode, the spectrum analyzer or receiver recorded all emissions at their peak value as the frequency band selected was scanned. By combining this function with another feature called "peak hold," the measurement device had the ability to measure intermittent or low duty cycle transient emission peak levels. In this mode the measuring device made a slow scan across the frequency band selected and measured the peak emission value found at each frequency across the band.

Quasi-Peak

Quasi-peak measurements were taken using the quasi-peak detector when the true peak values exceeded or were within 2 dB of a quasi-peak specification limit. Additional QP measurements may have been taken at the discretion of the operator.

Average

Average measurements were taken using the average detector when the true peak values exceeded or were within 2 dB of an average specification limit. Additional average measurements may have been taken at the discretion of the operator. If the specification or test procedure requires trace averaging, then the averaging was performed using 100 samples or as required by the specification. All other average measurements are performed using video bandwidth averaging. To make these measurements, the test engineer reduces the video bandwidth on the measuring device until the modulation of the signal is filtered out. At this point the measuring device is set into the linear mode and the scan time is reduced.