CKC LABORATORIES, INC. Testing the Future

ACCREDITED
Certicate Numbers
803.01, 803.02, 803.05, 803.06
EMC

ADDENDUM TO XCEEDID TEST REPORT FC08-024

FOR THE

PROX CARD READER, XF1550P

FCC PART 15 SUBPART B SECTIONS 15.107 & 15.109 CLASS B, SUBPART C SECTIONS 15.207 & 15.209 AND RSS-210 ISSUE 7

TESTING

DATE OF ISSUE: JUNE 25, 2008

PREPARED FOR:

XceedID
500 Golden Ridge Road, Bldg. 1
Golden, CO 80401

W.O. No.: 87587

PREPARED BY:

Mary Ellen Clayton
CKC Laboratories, Inc.
5046 Sierra Pines Drive
Mariposa, CA 95338

Date of test: February 14-25, 2008

Report No.: FC08-024A

TABLE OF CONTENTS

ADMINISTRATIVE INFORMATION

DATE OF TEST: February 14-25, 2008 **DATE OF RECEIPT:** February 14, 2008

REPRESENTATIVE: Mike Conlin

MANUFACTURER:
XceedID
500 Golden Ridge Road, Bldg. 1
Golden, CO 80401

TEST LOCATION:
CKC Laboratories, Inc.
5046 Sierra Pines Drive
Mariposa, CA 95338

TEST METHOD: ANSI C63.4 (2003), RSS-210 Issue 7 and RSS-GEN Issue 2

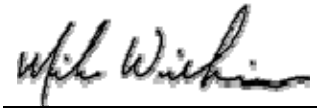
PURPOSE OF TEST:
Original Report: To perform the testing of the Prox Card Reader, XF1550P with the requirements for FCC Part 15 Subpart B Sections 15.107 & 15.109 Class B, Subpart C Sections 15.207 & 15.209 and RSS-210 devices.
Addendum A: To revise page 5 of the test report to correct the 15.109 frequency range tested to 30-1000MHz with no new testing.

APPROVALS

QUALITY ASSURANCE:

Steve Behm, Director of Engineering Services

TEST PERSONNEL:



Mike Wilkinson, EMC Engineer/Lab Manager

SUMMARY OF RESULTS

Test	Specification/Method	Results
Voltage Variations	FCC Part 15.31(e)	Pass
Conducted Emissions	FCC Part 15 Subpart B Section 15.107 Class B/15.207	Pass
Radiated Emissions	FCC Part 15 Subpart B Section 15.109 Class B	Pass
Radiated Emissions	FCC Part 15 Subpart C Section 15.209	Pass
99% Bandwidth	RSS-210/RSS-GEN	Pass

CONDITIONS DURING TESTING

No modifications to the EUT were necessary during testing.

FCC 15.31(e) Voltage Variations
Power variations per FCC 15.31(e) was performed on EUT with no variation in output power noted.

FCC 15.31(m) Number Of Channels
This device operates on a single channel.

FCC 15.33(a) Frequency Ranges Tested
15.107/15.207 Conducted Emissions: 150 kHz – 30 MHz
15.109 Radiated Emissions: 30 MHz – 1000 MHz
15.209 Radiated Emissions: 9 kHz - 1000 MHz

FCC SECTION 15.35: ANALYZER BANDWIDTH SETTINGS PER FREQUENCY RANGE			
TEST	BEGINNING FREQUENCY	ENDING FREQUENCY	BANDWIDTH SETTING
CONDUCTED EMISSIONS	150 kHz	30 MHz	9 kHz
RADIATED EMISSIONS	9 kHz	150 kHz	200 Hz
RADIATED EMISSIONS	150 kHz	30 MHz	9 kHz
RADIATED EMISSIONS	30 MHz	1000 MHz	120 kHz

FCC 15.203 Antenna Requirements
The antenna is an integral part of the EUT and is non-removable; therefore the EUT complies with Section 15.203 of the FCC rules.

EUT Operating Frequency
The EUT was operating at 125 kHz.

Temperature And Humidity During Testing
The temperature during testing was within +15°C and + 35°C.
The relative humidity was between 20% and 75%.

EQUIPMENT UNDER TEST (EUT) DESCRIPTION

The customer declares the EUT tested by CKC Laboratories was representative of a production unit.

EQUIPMENT UNDER TEST

Prox Card Reader

Manuf: XceedID
Model: XF1550P
Serial: 0022

PERIPHERAL DEVICES

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

Power Supply

Manuf: Topward
Model: TPS-4000
Serial: 918520

REPORT OF EMISSIONS MEASUREMENTS

TESTING PARAMETERS

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 dBµV/m, the spectrum analyzer reading in dBµV was corrected by using the following formula. This reading was then compared to the applicable specification limit.

SAMPLE CALCULATIONS		
	Meter reading	(dBµV)
+	Antenna Factor	(dB)
+	Cable Loss	(dB)
-	Distance Correction	(dB)
-	Preamplifier Gain	(dB)
=	Corrected Reading	(dBµV/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. 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. When conducted emissions testing was performed, a 10 dB external attenuator was used with internal offset correction in the analyzer.

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 "Peak" mode. Whenever a "Quasi-Peak" or "Average" reading is listed as one of the highest readings, this is indicated as a "QP" or an "Ave" on the appropriate rows of the data sheets. 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/receiver readings were recorded all emissions at their peak value as the frequency band selected was scanned. By combining this function with another feature of the measuring device called "peak hold," the measuring device had the ability to measure transients 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

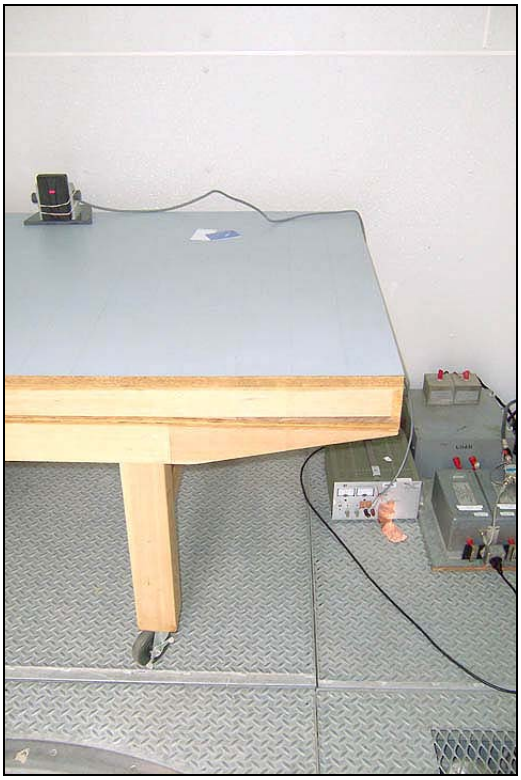
When the true peak values exceeded or were within 2 dB of the specification limit, quasi-peak measurements were taken using the quasi-peak detector.

Average

For certain frequencies, average measurements may be made using the spectrum analyzer/receiver. 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.

FCC 15.107/15.207 CONDUCTED EMISSIONS

Test Setup Photos



Test Data Sheets

Test Location: CKC Laboratories, Inc. •4933 Sierra Pines Dr. • Mariposa, CA 95338 • 1-800-500-4EMC (4362)

Customer:	**XceedID**		
Specification:	**FCC 15.107B/15.207 - AVE**		
Work Order #:	**87587**	Date:	2/20/2008
Test Type:	**Conducted Emissions**	Time:	8:43:36 AM
Equipment:	**Prox Card Reader**	Sequence#:	39
Manufacturer:	XceedID	Tested By:	Mike Wilkinson
Model:	XF1550P		120V 60Hz
S/N:	0022		

***Test Equipment*:**

Function	S/N	Calibration Date	Cal Due Date	Asset #
Agilent E4446A SA	US44300407	01/03/2007	01/03/2009	02660
Oscilloscope	US37340242	07/27/2007	07/27/2009	02713
150kHz HP Filter TTE	G7754	01/22/2008	01/22/2010	02608
Internal LISN Cable	N/A	03/23/2007	03/23/2009	CAB-SITED-INT-LISN
LISN, 8028-50-TS-24-BNC	8379276, 280	05/07/2007	05/07/2009	1248 & 1249

***Equipment Under Test* (* = EUT):**

Function	Manufacturer	Model #	S/N
Prox Card Reader*	XceedID	XF1550P	0022

Support Devices:

Function	Manufacturer	Model #	S/N
Power Supply	Topward	TPS-4000	918520

Test Conditions / Notes:

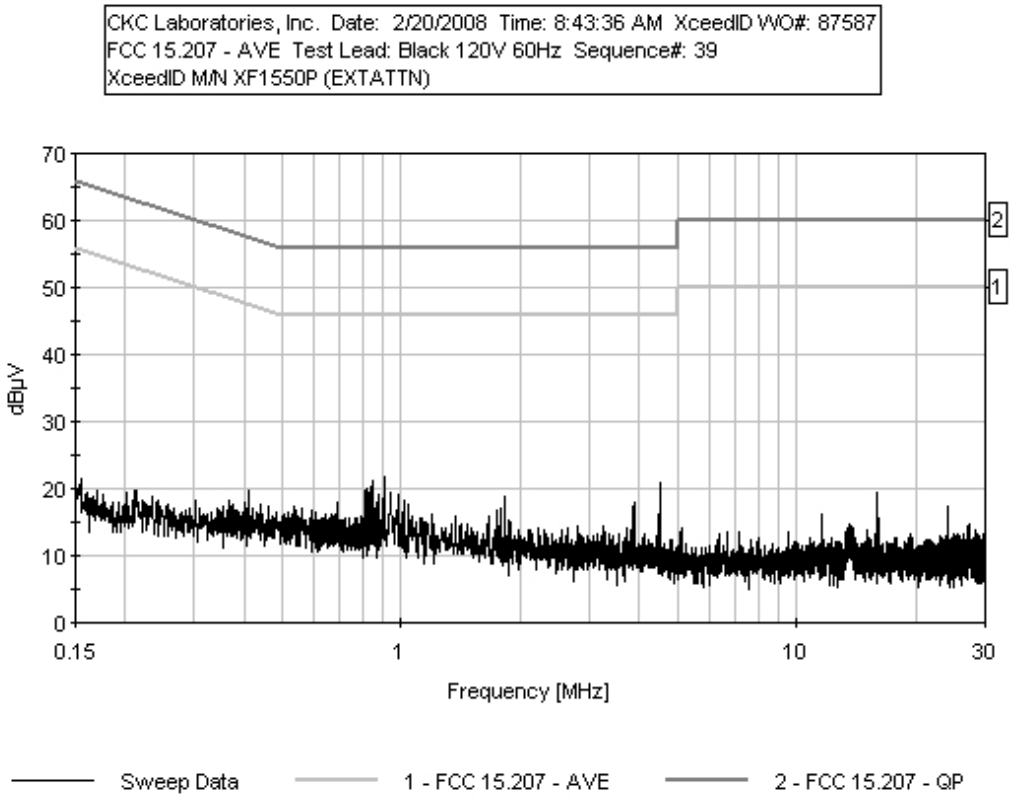
FCC 15.107(a) Class B/15.207. EUT is a proximity reader operating at 125kHz. The EUT is transmitting continuously. The equipment is powered via 12VDC power supply. Digital output operation verified before and after each test with the O-Scope. Frequency Range Investigated: 150kHz to 30 MHz. Temperature: 22ºC, Relative Humidity: 40%. SA RES BW =9kHz, VID BW = 9kHz.

Transducer Legend:

T1=CAB-SITED INT LISN 100k-30M T2=Filter 150kHz HP AN02608
T3=LISN -280 - BK

Measurement Data: Reading listed by margin. Test Lead: Black

#	Freq MHz	Rdng dBµV	T1 dB	T2 dB	T3 dB	dB	Dist Table	Corr dBµV	Spec dBµV	Margin dB	Polar Ant
1	906.974k	9.5	+11.8	+0.2	+0.2		+0.0	21.7	46.0	-24.3	Black
2	850.299k	8.8	+11.8	+0.3	+0.2		+0.0	21.1	46.0	-24.9	Black
3	4.501M	9.4	+11.0	+0.1	+0.3		+0.0	20.8	46.0	-25.2	Black
4	838.664k	8.1	+11.8	+0.3	+0.2		+0.0	20.4	46.0	-25.6	Black
5	820.484k	7.8	+11.8	+0.3	+0.2		+0.0	20.1	46.0	-25.9	Black
6	813.939k	7.4	+11.8	+0.3	+0.2		+0.0	19.7	46.0	-26.3	Black
7	936.743k	7.2	+11.8	+0.2	+0.2		+0.0	19.4	46.0	-26.6	Black
8	826.302k	7.0	+11.8	+0.3	+0.2		+0.0	19.3	46.0	-26.7	Black
9	808.122k	6.8	+11.8	+0.3	+0.2		+0.0	19.1	46.0	-26.9	Black
10	979.270k	6.9	+11.8	+0.2	+0.2		+0.0	19.1	46.0	-26.9	Black
11	875.024k	6.7	+11.8	+0.3	+0.2		+0.0	19.0	46.0	-27.0	Black
12	1.826M	6.9	+11.5	+0.2	+0.2		+0.0	18.8	46.0	-27.2	Black
13	898.469k	6.2	+11.8	+0.2	+0.2		+0.0	18.4	46.0	-27.6	Black
14	1.013M	6.0	+11.8	+0.2	+0.2		+0.0	18.2	46.0	-27.8	Black
15	832.119k	5.8	+11.8	+0.3	+0.2		+0.0	18.1	46.0	-27.9	Black


CKC Laboratories, Inc. Date: 2/20/2008 Time: 8:43:36 AM XceedID WO#: 87587
FCC 15.207 - AVE Test Lead: Black 120V 60Hz Sequence#: 39
XceedID M/N XF1550P (EXTATTN)
70
60
50
40
30
20
10
0
dBµV
0.15
1
10
30
Frequency [MHz]
2
1
Sweep Data
1 - FCC 15.207 - AVE
2 - FCC 15.207 - QP

Test Location: CKC Laboratories, Inc. •4933 Sierra Pines Dr. • Mariposa, CA 95338 • 1-800-500-4EMC (4362)

Customer: **XceedID**
Specification: **FCC 15.107B/15.207 - AVE**
Work Order #: **87587** Date: 2/20/2008
Test Type: **Conducted Emissions** Time: 8:46:35 AM
Equipment: **Prox Card Reader** Sequence#: 40
Manufacturer: XceedID Tested By: Mike Wilkinson
Model: XF1550P 120V 60Hz
S/N: 0022

***Test Equipment*:**

Function	S/N	Calibration Date	Cal Due Date	Asset #
Agilent E4446A SA	US44300407	01/03/2007	01/03/2009	02660
Oscilloscope	US37340242	07/27/2007	07/27/2009	02713
150kHz HP Filter TTE	G7754	01/22/2008	01/22/2010	02608
Internal LISN Cable	N/A	03/23/2007	03/23/2009	CAB-SITED-INT-LISN
LISN, 8028-50-TS-24-BNC	8379276, 280	05/07/2007	05/07/2009	1248 & 1249

***Equipment Under Test* (* = EUT):**

Function	Manufacturer	Model #	S/N
Prox Card Reader*	XceedID	XF1550P	0022

Support Devices:

Function	Manufacturer	Model #	S/N
Power Supply	Topward	TPS-4000	918520

Test Conditions / Notes:

FCC 15.107(a) Class B/15.207. EUT is a proximity reader operating at 125kHz. The EUT is transmitting continuously. The equipment is powered via 12VDC power supply. Digital output operation verified before and after each test with the O-Scope. Frequency Range Investigated: 150kHz to 30 MHz. Temperature: 22ºC, Relative Humidity: 40%. SA RES BW =9kHz, VID BW = 9kHz

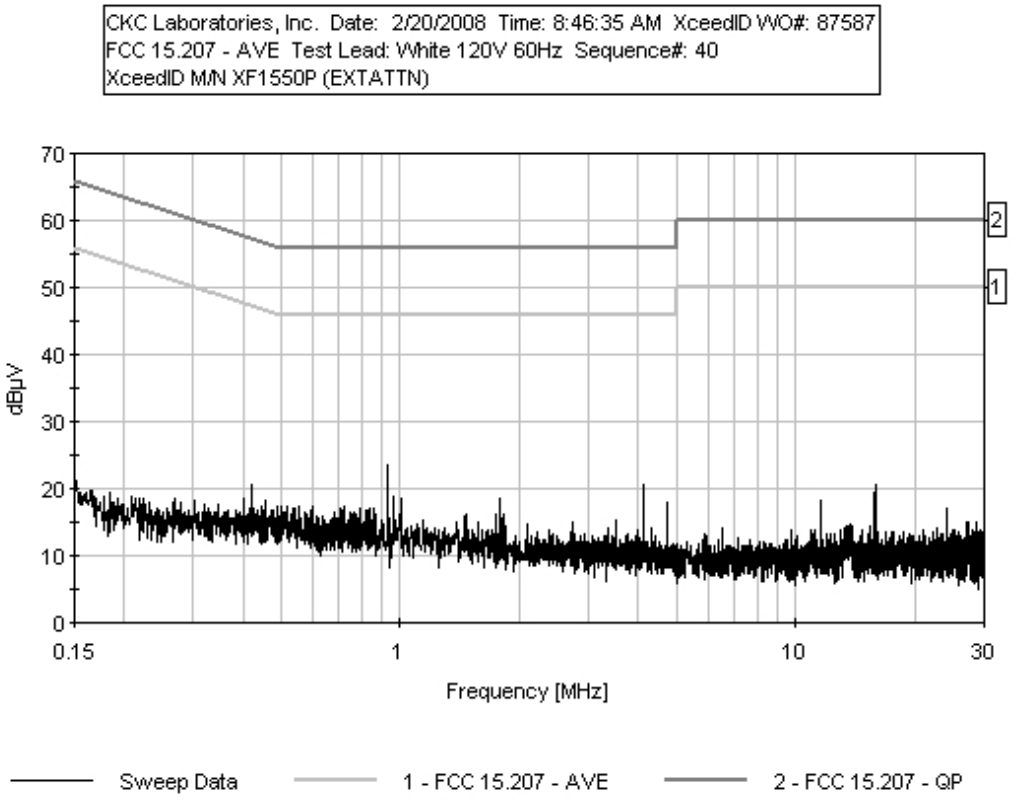
Transducer Legend:

T1=CAB-SITED INT LISN 100k-30M T2=Filter 150kHz HP AN02608
T3=LISN -276 - WT

Measurement Data: Reading listed by margin. Test Lead: White

#	Freq MHz	Rdng dBµV	T1 dB	T2 dB	T3 dB	dB	Dist Table	Corr dBµV	Spec dBµV	Margin dB	Polar Ant
1	932.490k	11.3	+11.8	+0.2	+0.2		+0.0	23.5	46.0	-22.5	White
2	4.126M	9.1	+11.0	+0.1	+0.3		+0.0	20.5	46.0	-25.5	White
3	419.793k	8.2	+12.0	+0.2	+0.1		+0.0	20.5	47.5	-27.0	White
4	966.512k	6.6	+11.8	+0.2	+0.2		+0.0	18.8	46.0	-27.2	White
5	1.005M	6.3	+11.8	+0.2	+0.2		+0.0	18.5	46.0	-27.5	White
6	1.783M	6.6	+11.5	+0.2	+0.2		+0.0	18.5	46.0	-27.5	White
7	4.751M	6.5	+10.9	+0.1	+0.5		+0.0	18.0	46.0	-28.0	White

8	453.972k	6.0	+11.9	+0.2	+0.2	+0.0	18.3	46.8	-28.5	White
9	499.059k	5.1	+11.9	+0.3	+0.2	+0.0	17.5	46.0	-28.5	White
10	600.868k	5.3	+11.8	+0.3	+0.1	+0.0	17.5	46.0	-28.5	White
11	515.785k	5.0	+11.9	+0.3	+0.2	+0.0	17.4	46.0	-28.6	White
12	723.766k	5.2	+11.8	+0.3	+0.1	+0.0	17.4	46.0	-28.6	White
13	488.878k	5.1	+11.9	+0.3	+0.2	+0.0	17.5	46.2	-28.7	White
14	556.508k	5.1	+11.8	+0.3	+0.1	+0.0	17.3	46.0	-28.7	White
15	544.873k	4.8	+11.8	+0.3	+0.2	+0.0	17.1	46.0	-28.9	White



FCC 15.109 RADIATED EMISSIONS

Test Setup Photos

Test Data Sheets

Test Location: CKC Laboratories, Inc. •4933 Sierra Pines Dr. • Mariposa, CA 95338 • 1-800-500-4EMC (4362)

Customer: **XceedID**
Specification: **15.109 CLASS B**
Work Order #: **87587** Date: 2/14/2008
Test Type: **Radiated Scan** Time: 16:35:27
Equipment: **Prox Card Reader** Sequence#: 8
Manufacturer: XceedID Tested By: Mike Wilkinson
Model: XF1550P
S/N: 0022

***Test Equipment*:**

Function	S/N	Calibration Date	Cal Due Date	Asset #
Agilent E4446A SA	US44300407	01/03/2007	01/03/2009	02660
HP 8447D Preamp	1937A02604	03/14/2007	03/14/2009	00099
Chase CBL6111C Bilog	2456	12/30/2006	12/30/2008	01991
10M SITE CBL MAST CBL	N/A	03/23/2007	03/23/2009	CAB-SITED10M
Oscilloscope	US37340242	07/27/2007	07/27/2009	02713

***Equipment Under Test* (* = EUT):**

Function	Manufacturer	Model #	S/N
Prox Card Reader*	XceedID	XF1550P	0022

Support Devices:

Function	Manufacturer	Model #	S/N
Power Supply	Topward	TPS-4000	918520

Test Conditions / Notes:

EUT is a proximity reader operating at 125kHz. The EUT is transmitting continuously. The equipment is powered via 12VDC power supply. Digital output operation verified before and after each test with the O-Scope. Frequency Range Investigated: 30-1000MHz. Temperature: 22ºC, Relative Humidity: 40%

Transducer Legend:

T1=AMP AN00099 T2=ANT AN01991 25-1000MHz
T3=CAB-SITED10M-9k-1G

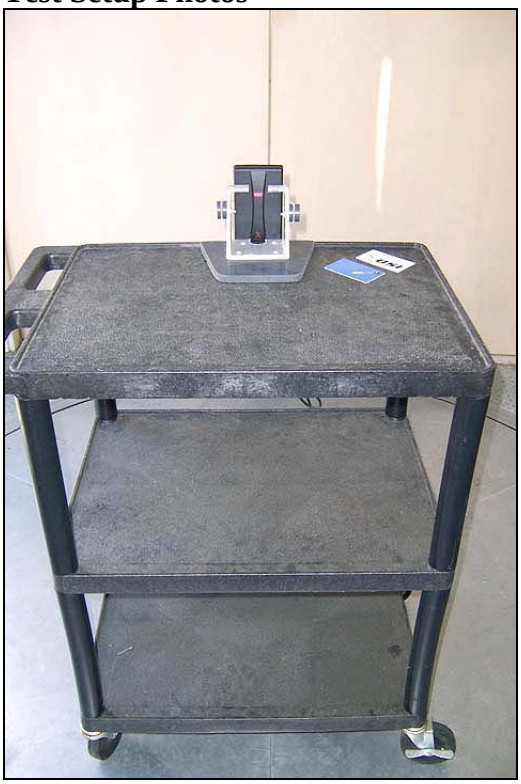
Measurement Data: Reading listed by margin. Test Distance: 10 Meters

#	Freq MHz	Rdng dBµV	T1 dB	T2 dB	T3 dB	dB	Dist Table	Corr dBµV/m	Spec dBµV/m	Margin dB	Polar Ant
1	264.000M	37.8	-26.4	+12.8	+5.2		+10.0	39.4	46.0	-6.6	Vert
2	192.008M QP	40.0	-26.7	+9.1	+4.0		+10.0	36.4	43.5	-7.1	Vert
3	448.000M	31.5	-27.5	+17.1	+6.8		+10.0	37.9	46.0	-8.1	Vert
4	400.000M	27.8	-27.3	+15.9	+6.4		+10.0	32.8	46.0	-13.2	Horiz
5	192.000M	33.5	-26.7	+9.1	+4.0		+10.0	29.9	43.5	-13.6	Horiz
6	64.000M	34.4	-27.2	+6.5	+2.2		+10.0	25.9	40.0	-14.1	Vert

7	128.000M	31.3	-27.0	+11.7	+3.3	+10.0	29.3	43.5	-14.2	Vert
8	208.000M	30.8	-26.6	+9.7	+4.3	+10.0	28.2	43.5	-15.3	Vert
9	384.000M	25.7	-27.1	+15.5	+6.2	+10.0	30.3	46.0	-15.7	Vert
10	160.000M	30.0	-26.9	+10.7	+3.7	+10.0	27.5	43.5	-16.0	Horiz
11	304.000M	27.4	-26.4	+13.5	+5.5	+10.0	30.0	46.0	-16.0	Vert
12	160.000M	29.7	-26.9	+10.7	+3.7	+10.0	27.2	43.5	-16.3	Vert
13	320.000M	26.7	-26.5	+14.0	+5.5	+10.0	29.7	46.0	-16.3	Horiz
14	256.000M	28.1	-26.4	+12.6	+5.1	+10.0	29.4	46.0	-16.6	Vert
15	320.000M	25.5	-26.5	+14.0	+5.5	+10.0	28.5	46.0	-17.5	Vert
16	240.000M	25.4	-26.4	+11.9	+4.8	+10.0	25.7	46.0	-20.3	Vert
17	72.000M	27.2	-27.1	+6.5	+2.3	+10.0	18.9	40.0	-21.1	Vert

FCC 15.209 RADIATED EMISSIONS

Test Setup Photos



Test Data Sheets

Test Location: CKC Laboratories, Inc. •4933 Sierra Pines Dr. • Mariposa, CA 95338 • 1-800-500-4EMC (4362)

Customer: **XceedID**
Specification: **FCC 15.209**
Work Order #: **87587** Date: 2/18/2008
Test Type: **Radiated Scan** Time: 09:34:07
Equipment: **Prox Card Reader** Sequence#: 18
Manufacturer: XceedID Tested By: Mike Wilkinson
Model: XF1550P
S/N: 0022

***Test Equipment*:**

Function	S/N	Calibration Date	Cal Due Date	Asset #
Agilent E4446A SA	US44300407	01/03/2007	01/03/2009	02660
EMCO Loop Antenna	1074	05/01/2007	05/01/2009	00226
10M SITE CBL MAST CBL	N/A	03/23/2007	03/23/2009	CAB-SITED10M
Oscilloscope	US37340242	07/27/2007	07/27/2009	02713

***Equipment Under Test* (* = EUT):**

Function	Manufacturer	Model #	S/N
Prox Card Reader*	XceedID	XF1550P	0022

Support Devices:

Function	Manufacturer	Model #	S/N
Power Supply	Topward	TPS-4000	918520

Test Conditions / Notes:

EUT is a proximity reader operating at 125kHz. The EUT is transmitting continuously. The equipment is powered via 12VDC power supply. Digital output operation verified before and after each test with the O-Scope. Power variations per FCC 15.31(e) was performed on EUT with no variation in output power noted. Frequency Range Investigated: Carrier. Temperature: 22ºC, Relative Humidity: 40%. SA RES BW = 200Hz, VID BW = 620Hz.

Transducer Legend:

T1=CAB-SITED10M-9k-1G	T2=Mag Loop - AN 00226 - 9kHz-30M

Measurement Data: Reading listed by margin. Test Distance: 10 Meters

#	Freq MHz	Rdng dBµV	T1 dB	T2 dB	dB	dB	Dist Table	Corr dBµV/m	Spec dBµV/m	Margin dB	Polar Ant
1	125.005k	45.3	+0.2	+9.9			-59.0	-3.6	25.7	-29.3	Vert
2	125.005k	37.9	+0.2	+9.9			-59.0	-11.0	25.7	-36.7	Horiz

Test Location: CKC Laboratories, Inc. •4933 Sierra Pines Dr. • Mariposa, CA 95338 • 1-800-500-4EMC (4362)

Customer: **XceedID**
Specification: **FCC 15.209**
Work Order #: **87587** Date: 2/18/2008
Test Type: **Radiated Scan** Time: 09:09:43
Equipment: **Prox Card Reader** Sequence#: 17
Manufacturer: XceedID Tested By: Mike Wilkinson
Model: XF1550P
S/N: 0022

***Test Equipment*:**

Function	S/N	Calibration Date	Cal Due Date	Asset #
Agilent E4446A SA	US44300407	01/03/2007	01/03/2009	02660
EMCO Loop Antenna	1074	05/01/2007	05/01/2009	00226
10M SITE CBL MAST CBL	N/A	03/23/2007	03/23/2009	CAB-SITED10M
Oscilloscope	US37340242	07/27/2007	07/27/2009	02713

***Equipment Under Test* (* = EUT):**

Function	Manufacturer	Model #	S/N
Prox Card Reader*	XceedID	XF1550P	0022

Support Devices:

Function	Manufacturer	Model #	S/N
Power Supply	Topward	TPS-4000	918520

Test Conditions / Notes:

EUT is a proximity reader operating at 125kHz. The EUT is transmitting continuously. The equipment is powered via 12VDC power supply. Digital output operation verified before and after each test with the O-Scope. Frequency Range Investigated: 9kHz to 30 MHz. Temperature: 22ºC, Relative Humidity: 40%. SA RES BW = 200Hz, VID BW = 620Hz.

Transducer Legend:

T1=CAB-SITED10M-9k-1G	T2=Mag Loop - AN 00226 - 9kHz-30M

Measurement Data: Reading listed by margin. Test Distance: 10 Meters

#	Freq MHz	Rdng dBµV	T1 dB	T2 dB	dB	dB	Dist Table	Corr dBµV/m	Spec dBµV/m	Margin dB	Polar Ant
1	249.996k	31.5	+0.2	+9.8			-59.0	-17.5	19.6	-37.1	Vert
2	249.996k	29.0	+0.2	+9.8			-59.0	-20.0	19.6	-39.6	Horiz

Test Location: CKC Laboratories, Inc. •4933 Sierra Pines Dr. • Mariposa, CA 95338 • 1-800-500-4EMC (4362)

Customer: **XceedID**
Specification: **FCC 15.209**
Work Order #: **87587** Date: 2/14/2008
Test Type: **Radiated Scan** Time: 16:18:13
Equipment: **Prox Card Reader** Sequence#: 7
Manufacturer: XceedID Tested By: Mike Wilkinson
Model: XF1550P
S/N: 0022

***Test Equipment*:**

Function	S/N	Calibration Date	Cal Due Date	Asset #
Agilent E4446A SA	US44300407	01/03/2007	01/03/2009	02660
HP 8447D Preamp	1937A02604	03/14/2007	03/14/2009	00099
Chase CBL6111C Bilog	2456	12/30/2006	12/30/2008	01991
10M SITE CBL MAST CBL	N/A	03/23/2007	03/23/2009	CAB-SITED10M
Oscilloscope	US37340242	07/27/2007	07/27/2009	02713

***Equipment Under Test* (* = EUT):**

Function	Manufacturer	Model #	S/N
Prox Card Reader*	XceedID	XF1550P	0022

Support Devices:

Function	Manufacturer	Model #	S/N
Power Supply	Topward	TPS-4000	918520

Test Conditions / Notes:

EUT is a proximity reader operating at 125kHz. The EUT is transmitting continuously. The equipment is powered via 12VDC power supply. Digital output operation verified before and after each test with the O-Scope. Frequency Range Investigated: 30-1000MHz. Temperature: 22ºC, Relative Humidity: 40%.

Transducer Legend:

T1=AMP AN00099 T2=ANT AN01991 25-1000MHz
T3=CAB-SITED10M-9k-1G

Measurement Data: Reading listed by margin. Test Distance: 10 Meters

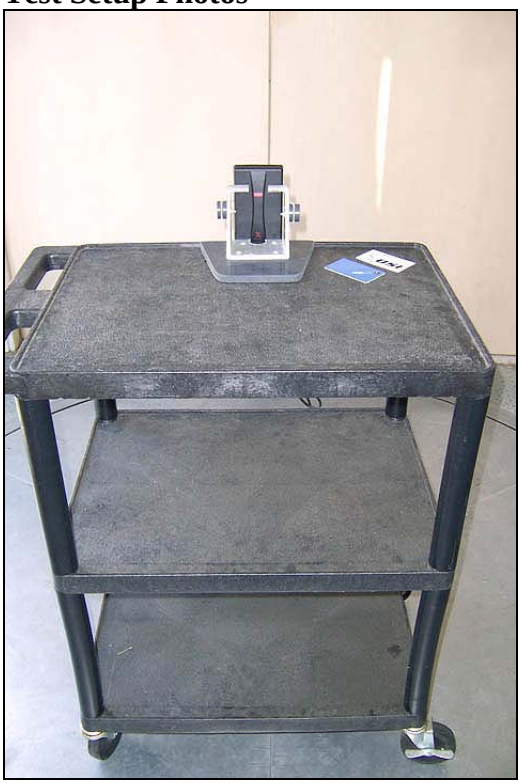
#	Freq MHz	Rdng dBµV	T1 dB	T2 dB	T3 dB	dB	Dist Table	Corr dBµV/m	Spec dBµV/m	Margin dB	Polar Ant
1	31.750M	31.6	-27.2	+18.1	+1.5		+10.0	34.0	40.0	-6.0	Vert
2	35.000M	31.0	-27.2	+16.3	+1.6		+10.0	31.7	40.0	-8.3	Vert
3	44.375M	30.3	-27.2	+11.5	+1.8		+10.0	26.4	40.0	-13.6	Vert
4	50.375M	30.7	-27.1	+9.3	+1.9		+10.0	24.8	40.0	-15.2	Vert
5	50.375M	26.7	-27.1	+9.3	+1.9		+10.0	20.8	40.0	-19.2	Horiz
6	63.500M	28.1	-27.2	+6.6	+2.2		+10.0	19.7	40.0	-20.3	Horiz
7	59.500M	27.1	-27.2	+6.9	+2.2		+10.0	19.0	40.0	-21.0	Horiz

RSS-GEN 99% BANDWIDTH

Test Equipment

Function	S/N	Calibration Date	Cal Due Date	Asset #
Agilent E4446A SA	US44300407	01/03/2007	01/03/2009	02660
EMCO Loop Antenna	1074	05/01/2007	05/01/2009	00226
10M SITE CBL MAST CBL	N/A	03/23/2007	03/23/2009	CAB-SITED10M

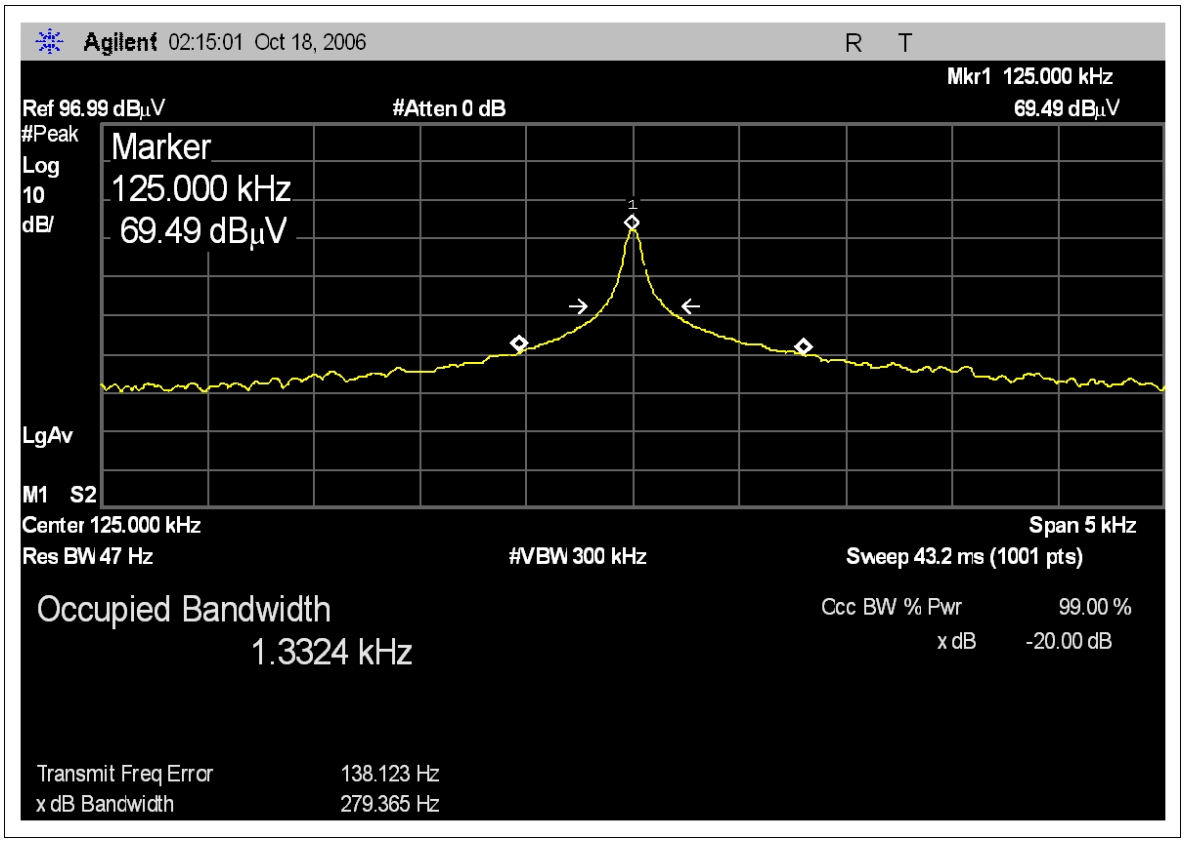
Test Setup Photos



Test Conditions

EUT is a proximity reader operating at 125kHz. The EUT is transmitting continuously. The equipment is powered via 12VDC power supply. Digital output operation verified before and after each test with the O-Scope. Power variations per FCC 15.31(e) was performed on EUT with no variation in output power noted. Frequency Range Investigated: Carrier. Temperature: 22ºC, Relative Humidity: 40%.

Plots


Agilent 02:15:01 Oct 18, 2006
R T
Mkr1 125.000 kHz
Ref 96.99 dBµV
#Atten 0 dB
69.49 dBµV
#Peak
Log
10
dB/
Marker
125.000 kHz
69.49 dBµV
1
LgAv
M1 S2
Center 125.000 kHz
Span 5 kHz
Res BW 47 Hz
#VBW 300 kHz
Sweep 43.2 ms (1001 pts)
Occupied Bandwidth
1.3324 kHz
Occ BW % Pwr 99.00 %
x dB -20.00 dB
Transmit Freq Error 138.123 Hz
x dB Bandwidth 279.365 Hz