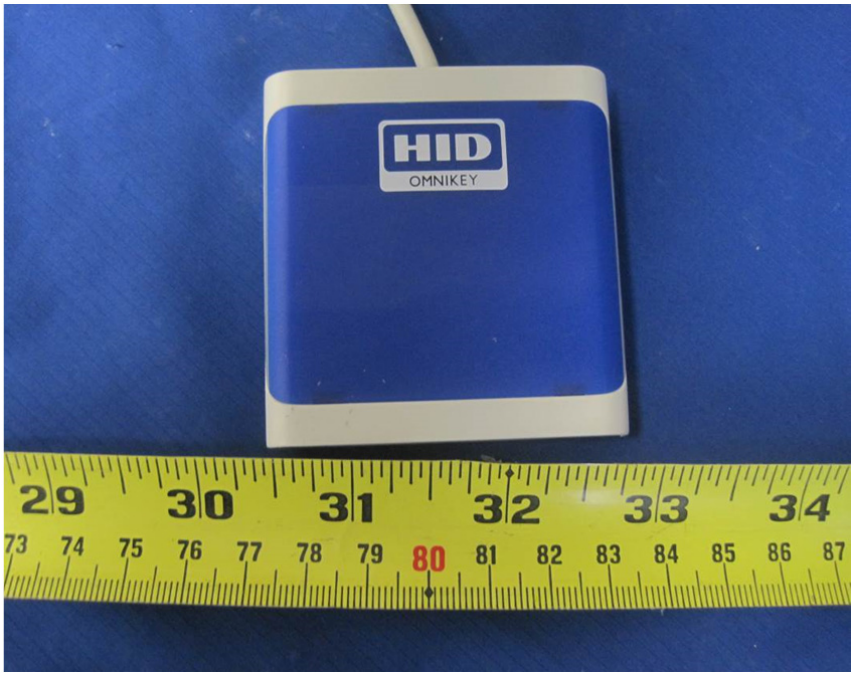
HID GLOBAL CORPORATION

SMART CARD READER

Model: OMNIKEY 5025CL

August 29, 2013
Report No.: SL13062501-HID-014_FCC-IC_Rev1.0
(This report supersedes: SL13062501-HID-014_FCC-IC)



RF Test Report

To: 47 CFR 15.209: 2012; RSS-210 Issue 8: 2010

SIEMIC, INC.
Accessing global markets

Modifications made to the product : None

This Test Report is Issued Under the Authority of:	
Angel Escamilla	David Zhang
Angel Escamilla Compliance Engineer	David Zhang Engineering Reviewer

775 Montague Expressway, Milpitas, CA 95035, USA • Phone: (+1) 408 526 1188 • Facsimile (+1) 408 526 1088

Visit us at: www.siemic.com; Follow us at:

Laboratory Introduction

SIEMIC, headquartered in the heart of Silicon Valley, with superior facilities in US and Asia, is one of the leading independent testing and certification facilities providing customers with one-stop shop services for Compliance Testing and Global Certifications.

In addition to testing and certification, SIEMIC provides initial design reviews and compliance management throughout a project. Our extensive experience with China, Asia Pacific, North America, European, and International compliance requirements, assures the fastest, most cost effective way to attain regulatory compliance for the global markets.

Accreditations for Conformity Assessment

Country/Region	Accreditation Body	Scope
USA	FCC, A2LA	EMC, RF/Wireless, Telecom
Canada	IC, A2LA, NIST	EMC, RF/Wireless, Telecom
Taiwan	BSMI, NCC, NIST	EMC, RF, Telecom, Safety
Hong Kong	OFTA, NIST	RF/Wireless, Telecom
Australia	NATA, NIST	EMC, RF, Telecom, Safety
Korea	KCC/RRA, NIST	EMI, EMS, RF, Telecom, Safety
Japan	VCCI, JATE, TELEC, RFT	EMI, RF/Wireless, Telecom
Mexico	NOM, COFETEL, Caniety	Safety, EMC, RF/Wireless, Telecom
Europe	A2LA, NIST	EMC, RF, Telecom, Safety

Accreditations for Product Certifications

Country	Accreditation Body	Scope
USA	FCC TCB, NIST	EMC, RF, Telecom
Canada	IC FCB, NIST	EMC, RF, Telecom
Singapore	iDA, NIST	EMC, RF, Telecom
EU	NB	EMC & R&TTE Directive
Japan	MIC (RCB 208)	RF, Telecom
Hong Kong	OFTA (US002)	RF, Telecom

CONTENTS

1 Report Revision History

Report No.	Report Version	Description	Issue Date
SL13062501-HID-014_FCC-IC	-	Original	8/26/2013
SL13062501-HID-014_FCC-IC_Rev1.0	1.0	Added the antenna gain on page 6, section 6.2	8/29/2013

2 Executive Summary

The purpose of this test program was to demonstrate compliance of the HID Global Corporation, Smart Card Reader, and model: OMNIKEY 5025CL against the current Stipulated Standards. The OMNIKEY 5025CL has demonstrated compliance with the Stipulated Standard listed on 1st page.

3 Customer information

Applicant Name	:	HID Global Corporation
Applicant Address	:	15370 Barranca Parkway , Irvine, CA 92618 USA
Manufacturer Name	:	HID Global Corporation
Manufacturer Address	:	15370 Barranca Parkway , Irvine, CA 92618 USA

4 Test site information

Lab performing tests	:	SIEMIC Laboratories
Lab Address	:	775 Montague Expressway, Milpitas, CA 95035
FCC Test Site No.	:	881796
IC Test Site No.	:	4842D-2
VCCI Test Site No.	:	A0133

5 Modification

Index	Item	Description	Note

6 EUT Information

6.1 EUT Description

Product Name	:	Smart Card Reader
Model No.	:	OMNIKEY 5025CL
Trade Name	:	HID
Serial No.	:	-
Input Power	:	5 VDC
Date of EUT received	:	August 29, 2013
Equipment Class/ Category	:	DCD
Clock Frequencies	:	8 MHz
Port/Connectors	:	USB

6.2 Radio Description

Spec for Radio -

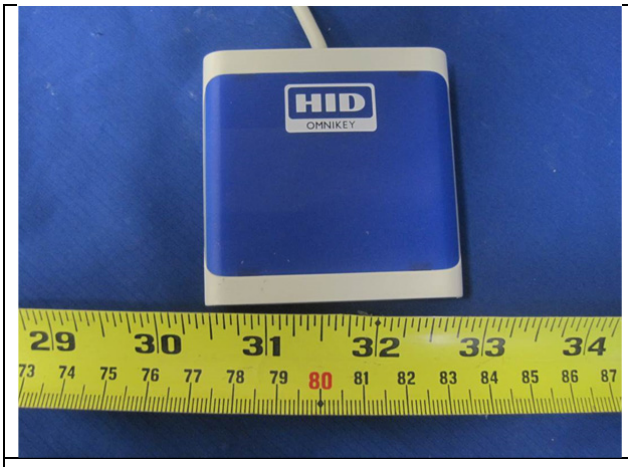
Radio Type	RFID
Operating Frequency	125 kHz
Modulation	AM
Antenna Type	Loop Antenna Integral to PWB
Antenna Gain	1 dBi

6.3 EUT test modes/configuration Description

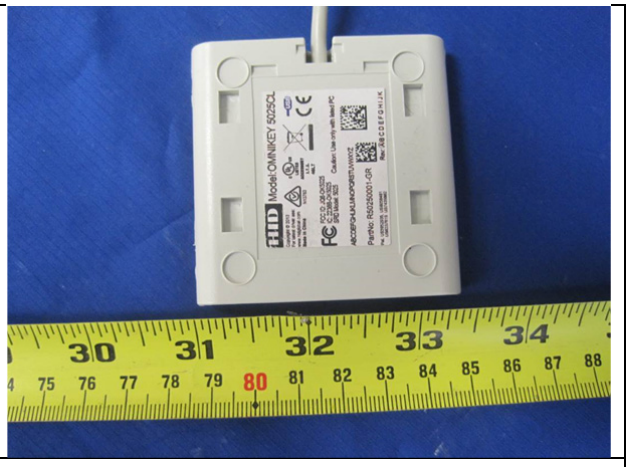
Mode	Note
RF test	EUT continuous transmitting when power on
Note :None	

Test Item	Operating mode	Tested antenna port	Test frequencies
Antenna Requirement	N/A	-	125 kHz
Conducted Emissions Voltage	Continuous Transmit	-	
Radiated Emissions	Continuous Transmit	-	
Frequency Stability	Continuous Transmit	-	
Occupied Bandwidth	Continuous Transmit	-	
Note: EUT uses a PCB trace Antenna and attached to the PCB board. Only using radiated measurement during the test.			

6.4 EUT Photos - External



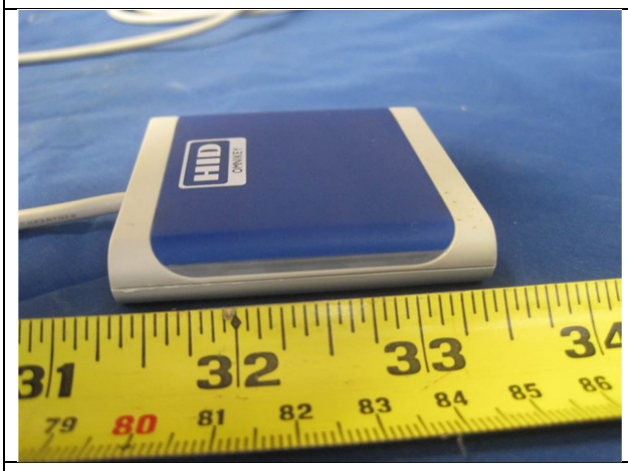
Top



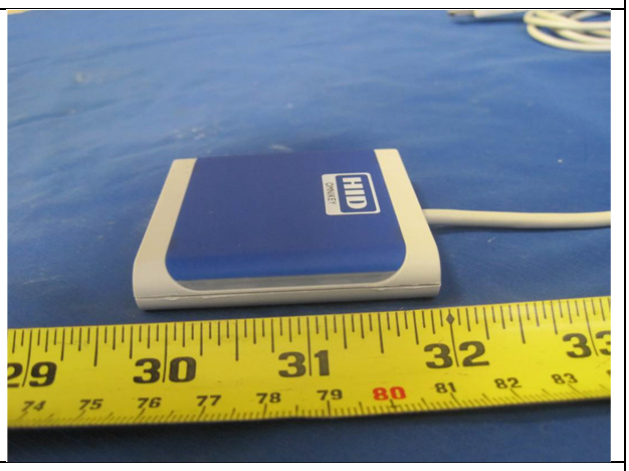
Bottom

Front

Rear

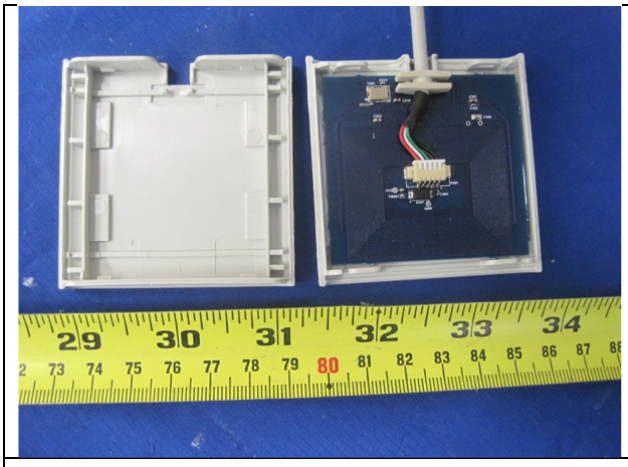


Left Side

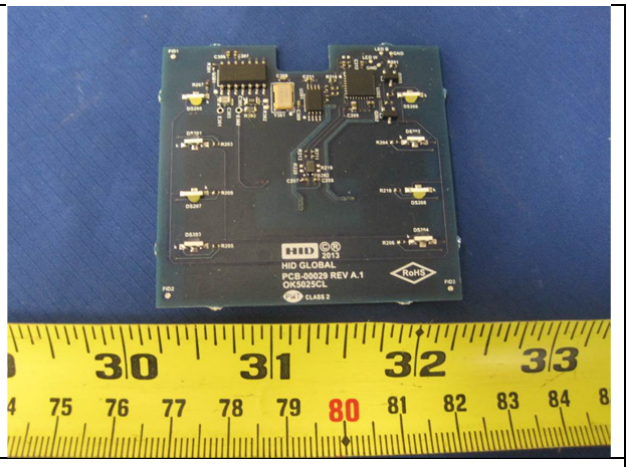


Right Side

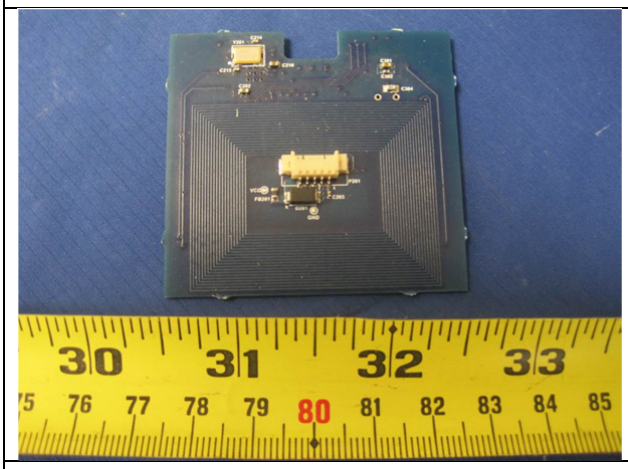
6.5 EUT Photos - Internal



Cover Open

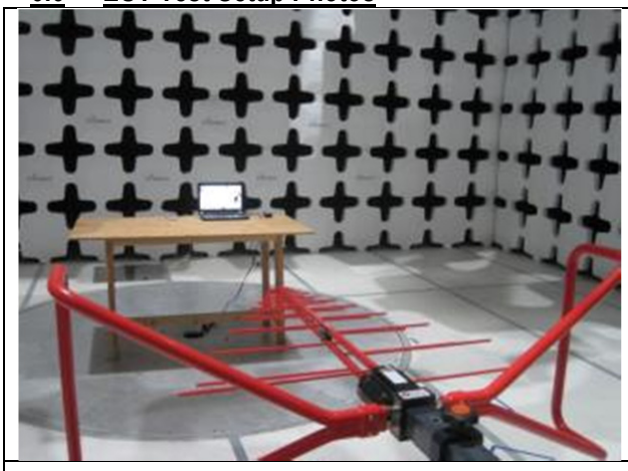


Main Board Top

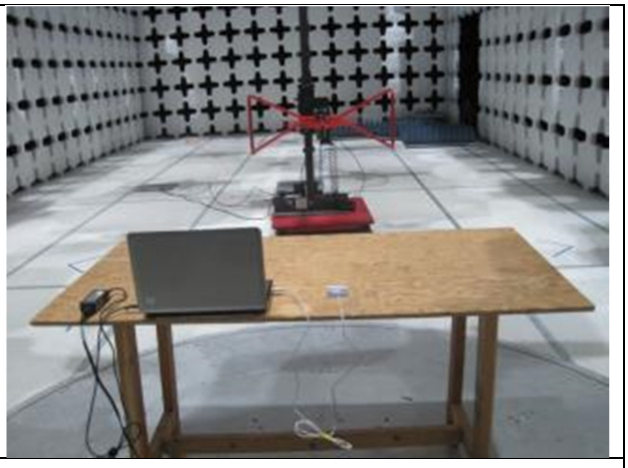


Main Board Bottom

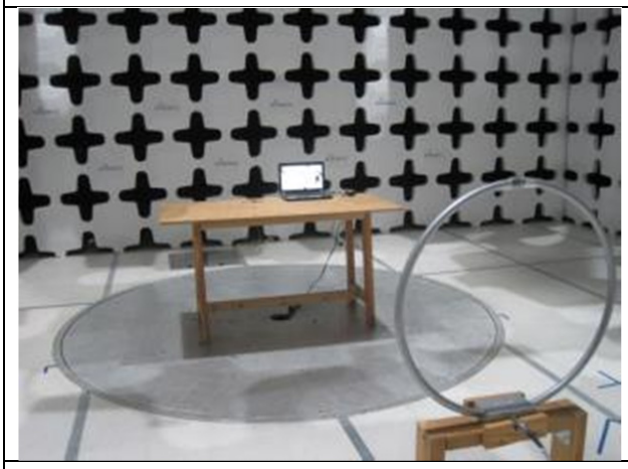
6.6 EUT Test Setup Photos



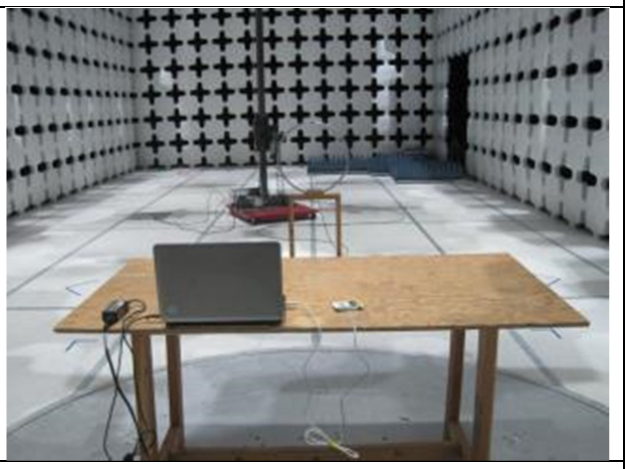
Radiated Emission Test setup (<1GHz) - Front



Radiated Emission Test setup (<1GHz) - Rear



Radiated Emission Test setup (<30MHz) - Front



Radiated Emission Test setup (<30MHz) - Rear

Conducted Emission Test setup - Front

Conducted Emission Test setup - Rear

7 Supporting Equipment/Software and cabling Description

7.1 Supporting Equipment

Index	Supporting Equipment Description	Model	Serial No	Manufacturer	Note
1	Laptop	Pavilion g4	-	HP	

7.2 Cabling Description

Name	Connection Start		Connection Stop		Length / shielding Info		Note
	From	I/O Port	To	I/O Port	Length (m)	Shielding	
Cable	EUT	USB	Laptop	USB	2.0	Unshielded	

7.3 Test Software Description

Test Item	Software	Description
Radiated & conducted Testing	Reader Utility	Monitor reader's function

8 Test Summary

Test Item	Test standard		Test Method/Procedure		Pass / Fail
Antenna Requirement	FCC	15.203	FCC		☒ Pass ☐ N/A
	IC		IC		
AC Conducted Emissions Voltage	FCC	15.207(a)	FCC	ANSI C63.4 2009	☒ Pass ☐ N/A
	IC	RSS Gen (7.2.4)	IC		

Test Item	Test standard		Test Method/Procedure		Pass / Fail
Radiated Emission below 30MHz	FCC	15.209	FCC	ANSI C63.4 2009	☒ Pass ☐ N/A
	IC	RSS210(2.2)/(2.6)	IC	RSS Gen 4.9	
Radiated Emission above 30MHz	FCC	15.209	FCC	ANSI C63.4 2009	☒ Pass ☐ N/A
	IC	RSS210(2.2)	IC	RSS Gen 4.9	
Frequency Stability	FCC	2.1055	FCC		☒ Pass ☐ N/A
	IC	RSS210(2.1)	IC	RSS Gen 4.7	
Occupied Bandwidth	FCC	-	FCC		☒ Pass ☐ N/A
	IC	RSS-Gen(4.6.1)	IC	RSS-Gen(4.6.1)	
Remark	1. All measurement uncertainties are not taken into consideration for all presented test result. 2. The applicant shall ensure frequency stability by showing that an emission is maintained within the band of operation under all normal operating conditions as specified in the user's manual. 3. Test Method: ANSI C63.4: 2009 / RSS – Gen Issue 3: 2010				

9 Measurement Uncertainty

Test Item	Frequency Range	Description	Uncertainty
AC Conducted Emissions Voltage	150KHz – 30MHz	Confidence level of approximately 95% (in the case where distributions are normal), with a coverage factor of 2	±3.5dB
Radiated Spurious Emissions	9KHz – 30MHz	Confidence level of approximately 95% (in the case where distributions are normal), with a coverage factor of 2 (for EUTs < 0.5m X 0.5m X 0.5m)	+5.6dB/-4.5dB
Radiated Spurious Emissions	30MHz – 1GHz		+5.6dB/-4.5dB

10 Measurements, examination and derived results

10.1 Antenna Requirement

Spec	Item	Requirement	Applicable
§15.203		An intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. Antenna requirement must meet at least one of the following: a) Antenna must be permanently attached to the device. b) Antenna must use a unique type of connector to attach to the device. c) Device must be professionally installed. Installer shall be responsible for ensuring that the correct antenna is employed with the device.	☒
Remark	The RFID antenna is integral to the PCB board permanently to the device which meets the requirement (See Internal Photographs submitted as another Exhibit).		
Result	☒ PASS ☐ FAIL		

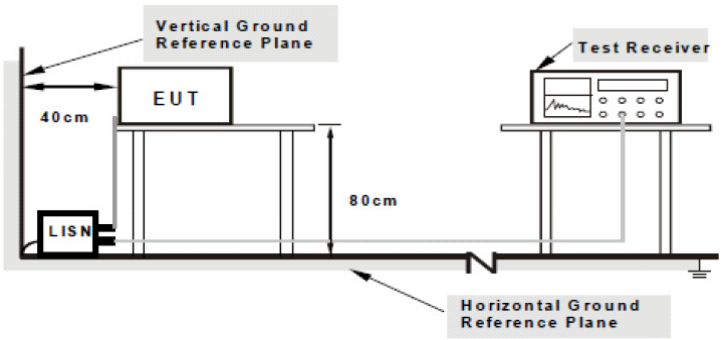
10.2 Conducted Emission Test Result

Conducted Emission Limit

Section	Frequency ranges (MHz)	Limit (dBuV)	
		QP	Average
Class B devices	0.15 ~ 0.5	66 – 56	56 – 46
	0.5 ~ 5	56	46
	5 ~ 30	60	50

Spec	Item	Requirement	Applicable
§ 15.207, RSS Gen (7.2.4)	a)	For an intentional radiator that is designed to be connected to the public utility (AC) power line, the radio frequency voltage that is conducted back onto the AC power line on any frequency or frequencies, within the band 150 kHz to 30 MHz, shall not exceed the limits set in § 15.207, as measured using a 50 µH/50 ohms line impedance stabilization network (LISN). AC Line conducted emission within the band 150KHz to 30MHz	☒

Test Setup



Note: 1.Support units were connected to second LISN.
2.Both of LISNs (AMN) are 80cm from EUT and at least 80cm from other units and other metal planes support units.

Procedure

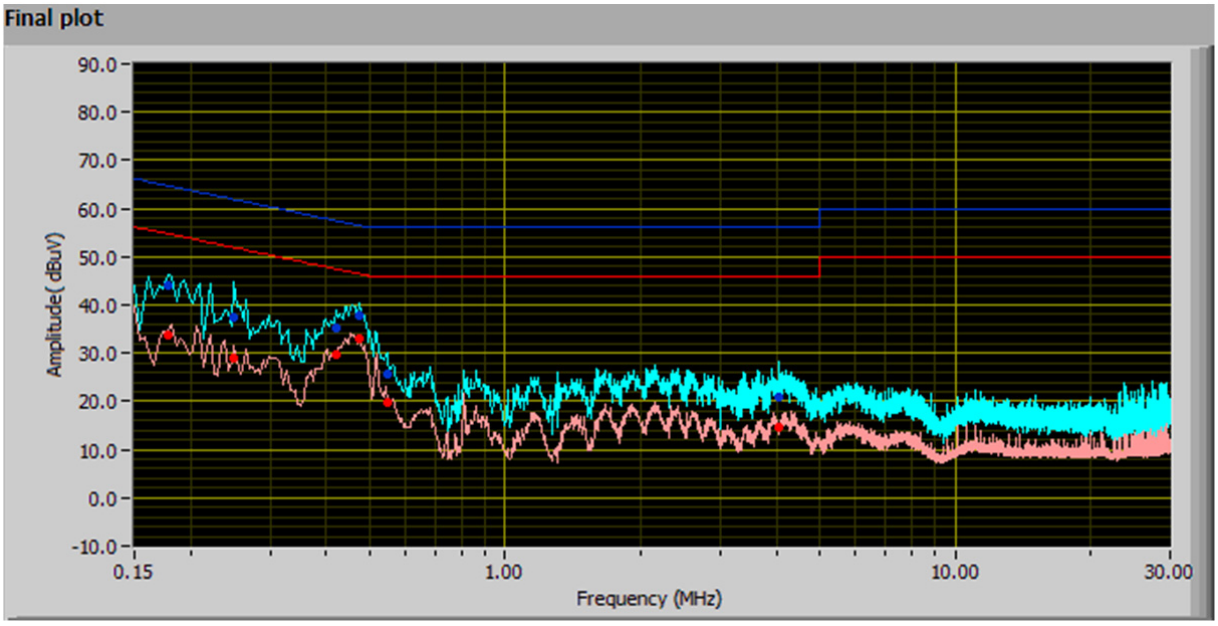
- The EUT and supporting equipment were set up in accordance with the requirements of the standard on top of a 1.5m x 1m x 0.8m high, non-metallic table, as shown in Annex B.
- The power supply for the EUT was fed through a 50Ω/50µH EUT LISN, connected to filtered mains.
- The RF OUT of the EUT LISN was connected to the EMI test receiver via a low-loss coaxial cable.
- All other supporting equipment was powered separately from another main supply.

Test Date	8/19/2013	Environmental condition	Temperature Relative Humidity Atmospheric Pressure	22oC 44 % 1025mbar
Remark				
Result	☒ Pass ☐ Fail			

Test Data ☒ Yes ☐ N/A

Test Plot ☒ Yes (See below) ☐ N/A

Test Result

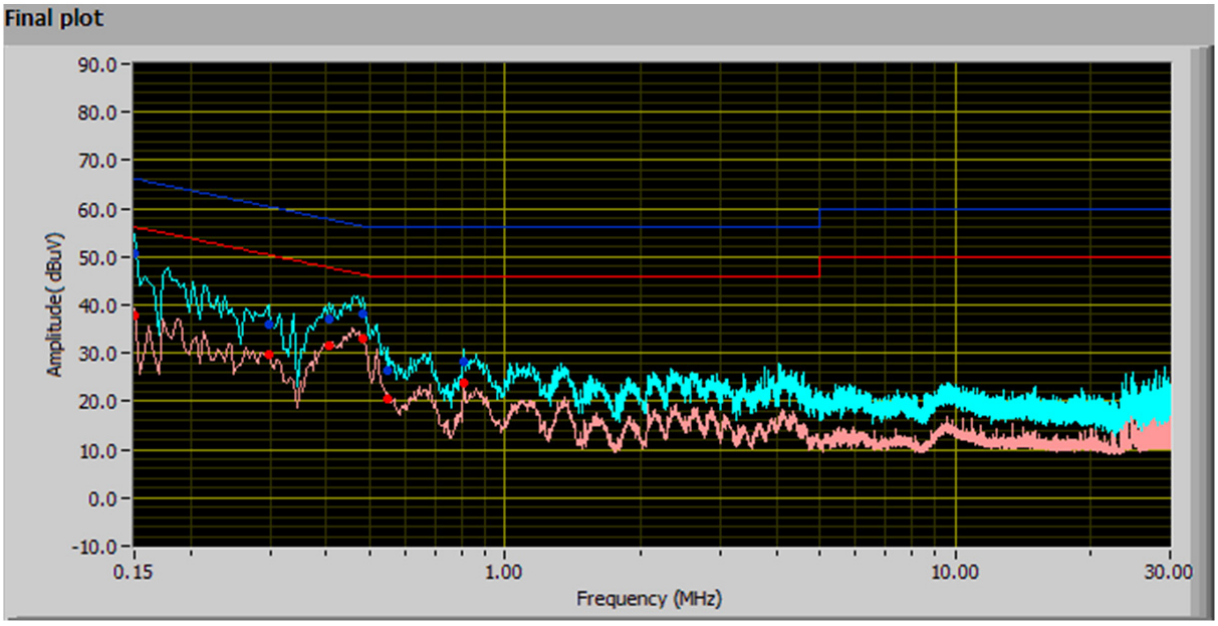


Quasi-Peak Limit

Average Limit

120V, 60Hz, Neutral Line

Frequency (MHz)	QP Value (dBµV)	Class B Limit (dB)	Pass / Fail	Margin (dB)	Avg Value (dBµV)	Class B Limit (dBµV)	Pass / Fail	Margin (dB)	Line
0.18	44.11	64.74	Pass	-20.63	33.90	54.74	Pass	-20.84	Neutral
0.25	37.43	61.86	Pass	-24.44	29.09	51.86	Pass	-22.78	Neutral
0.42	35.06	57.43	Pass	-22.37	29.73	47.43	Pass	-17.70	Neutral
0.47	37.81	56.45	Pass	-18.63	32.84	46.45	Pass	-13.60	Neutral
0.55	25.80	56.00	Pass	-30.20	19.94	46.00	Pass	-26.06	Neutral
4.05	20.86	56.00	Pass	-35.14	14.51	46.00	Pass	-31.49	Neutral



Quasi-Peak Limit

Average Limit

120V, 60Hz, Phase Line

Frequency (MHz)	QP Value (dBµV)	Class B Limit (dB)	Pass / Fail	Margin (dB)	Avg Value (dBµV)	Class B Limit (dBµV)	Pass / Fail	Margin (dB)	Line
0.15	50.77	66.19	Pass	-15.42	37.85	56.19	Pass	-18.34	Phase
0.30	35.87	60.38	Pass	-24.50	29.78	50.38	Pass	-20.59	Phase
0.41	36.93	57.76	Pass	-20.83	31.54	47.76	Pass	-16.22	Phase
0.48	38.30	56.31	Pass	-18.01	33.20	46.31	Pass	-13.11	Phase
0.55	26.46	56.00	Pass	-29.54	20.68	46.00	Pass	-25.32	Phase
0.81	28.37	56.00	Pass	-27.63	23.84	46.00	Pass	-22.16	Phase

10.2 Radiated Measurement

Receiver/Spectrum analyser setting

TEST	Detector	RBW	VBW	Test Distance		NOTES
Radiated Emission < 1GHz (30MHz – 1GHz)	PK/QP	100KHz	300KHz	3m	-	-
Radiated Emission < 30MHz	PK/QP	10KHz	30KHz	3m	-	-
Radiated Emission > 1GHz (1GHz – 40GHz)	PK/AV	1MHz	3MHz	3m	-	-

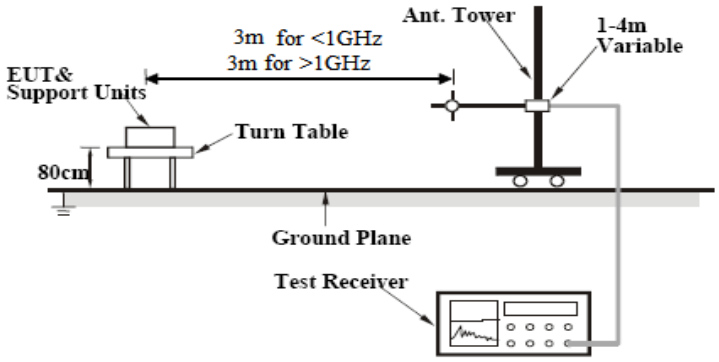
10.2.1 Radiated Measurement below 1GHz

Requirement(s):

Spec	Item	Requirement	Applicable
§ 15.209, RSS210(2.2)	a)	Except higher limit as specified elsewhere in other section, the emissions from the low-power radio-frequency devices shall not exceed the field strength levels specified in the following table and the level of any unwanted emissions shall not exceed the level of the fundamental emission. The tighter limit applies at the band edges	☒

Frequency range (MHz)	Field Strength (uV/m)	Measurements Distance (meters)
0.009-0.490	2400/F(kHz)	300
0.490-1.705	24000/F(kHz)	30
1.705-30.0	30	30
30 – 88	100	3
88 – 216	150	3
216 960	200	3
Above 960	500	3

Test Setup



Procedure

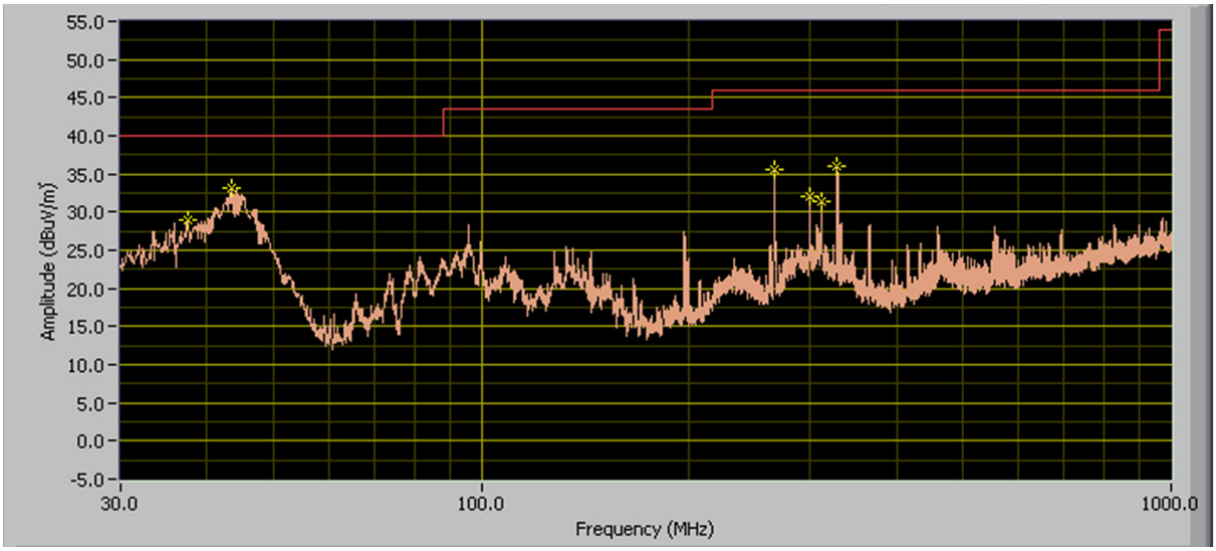
1. The EUT was switched on and allowed to warm up to its normal operating condition.
2. The test was carried out at the selected frequency points obtained from the EUT characterisation. Maximization of the emissions, was carried out by rotating the EUT, changing the antenna polarization, and adjusting the antenna height in the following manner:
   a. Vertical or horizontal polarisation (whichever gave the higher emission level over a full rotation of the EUT) was chosen.
   b. The EUT was then rotated to the direction that gave the maximum emission.
   c. Finally, the antenna height was adjusted to the height that gave the maximum emission.
3. A Quasi-peak measurement was then made for that frequency point.
4. Steps 2 and 3 were repeated for the next frequency point, until all selected frequency points were measured.

Test Date	8/16/2013	Environmental condition	Temperature Relative Humidity Atmospheric Pressure	26oC 44% 1029mbar
Remark				
Result	☒ Pass ☐ Fail			

Test Data ☒ Yes (See below) ☐ N/A

Test Plot ☒ Yes (See below) ☐ N/A

Graph-



Test Data

Frequency (MHz)	Quasi Peak (dBuV/m)	Azimuth (degree)	Polarity	Height (cm)	Limit (dBuV/m)	Margin (dB)	Detector
37.48	22.63	204.00	V	202.00	40.00	-17.37	QP
43.52	29.77	212.00	V	151.00	40.00	-10.23	QP
266.52	33.07	88.00	H	109.00	46.00	-12.93	QP
299.85	22.45	254.00	H	400.00	46.00	-23.55	QP
310.96	19.69	282.00	H	324.00	46.00	-26.31	QP
328.11	32.49	267.00	H	134.00	46.00	-13.51	QP

10.2.2 Radiated Measurement below 30MHz

Requirement(s):

<table>
<tr><td>Spec</td><td>Item</td><td>Requirement</td><td>Applicable</td></tr>
<tr><td>§ 15.209, RSS210(2.2)/(2.6)</td><td>a)</td><td>Except as provided elsewhere in this subpart, the emissions from an intentional radiator shall not exceed the field strength levels specified in the following table
<table>
<tr><th>Frequency range (MHz)</th><th>Field Strength (uV/m)</th><th>Measurements Distance (meters)</th></tr>
<tr><td>0.009-0.490</td><td>2400/F(kHz)</td><td>300</td></tr>
<tr><td>0.490-1.705</td><td>24000/F(kHz)</td><td>30</td></tr>
<tr><td>1.705-30.0</td><td>30</td><td>30</td></tr>
</table></td><td>☒</td></tr>
<tr><td>Test Setup</td><td colspan="3">1. The EUT and supporting equipment were set up in accordance with the requirements of the standard on top of a 1.5m X 1.0m X 0.8m high, non-metallic table.
2. The filtered power supply for the EUT and supporting equipment were tapped from the appropriate power sockets located on the turntable.
3. The relevant loop antenna was set at the required test distance away from the EUT and supporting equipment boundary.</td></tr>
<tr><td>Procedure</td><td colspan="3">For < 30MHz, Radiated emissions were measured according to ANSI C63.4. The EUT was set to transmit at the highest output power.
The EUT was set 3 meter away from the measuring antenna. The loop antenna was positioned 1 meter above the ground from the centre of the loop. The measuring bandwidth was set to 10 kHz.
The limit is converted from microvolt/meter to decibel microvolt/meter.</td></tr>
<tr><td>Test Date</td><td>8/16/2013</td><td>Environmental condition</td><td>Temperature 25oC
Relative Humidity 42%
Atmospheric Pressure 1029mbar</td></tr>
<tr><td>Remark</td><td colspan="3"></td></tr>
<tr><td>Result</td><td colspan="3">☒ Pass ☐ Fail</td></tr>
</table>

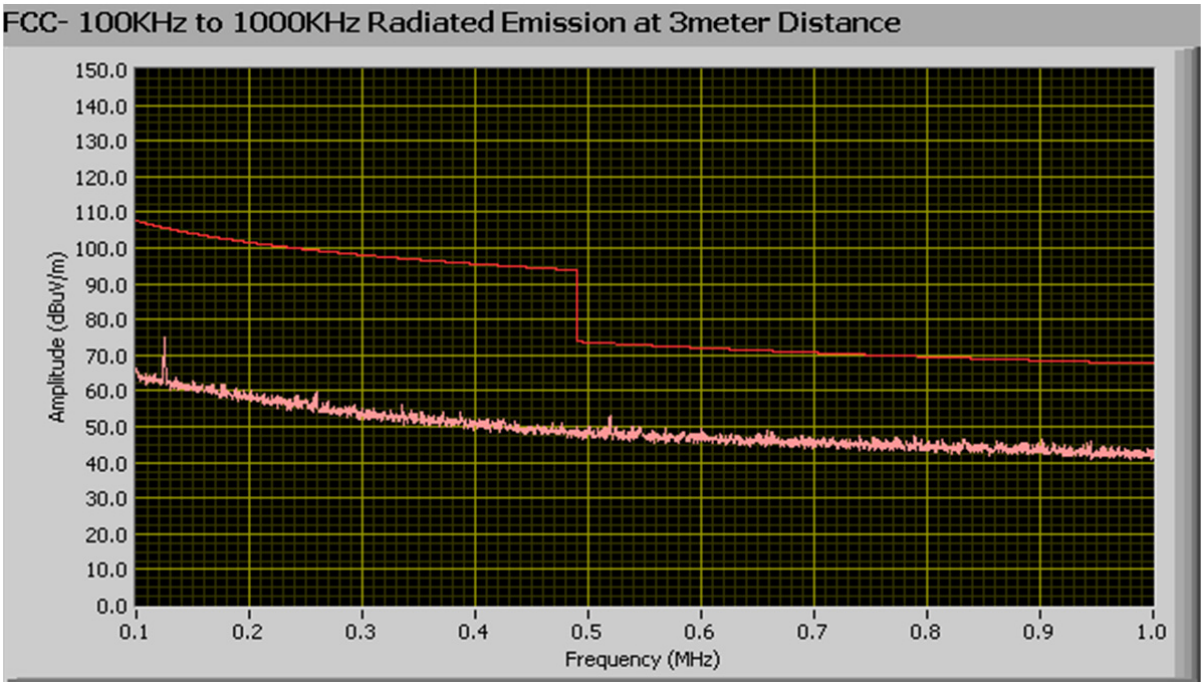
Test Data ☒ Yes (See below) ☐ N/A

Test Plot ☒ Yes (See below) ☐ N/A

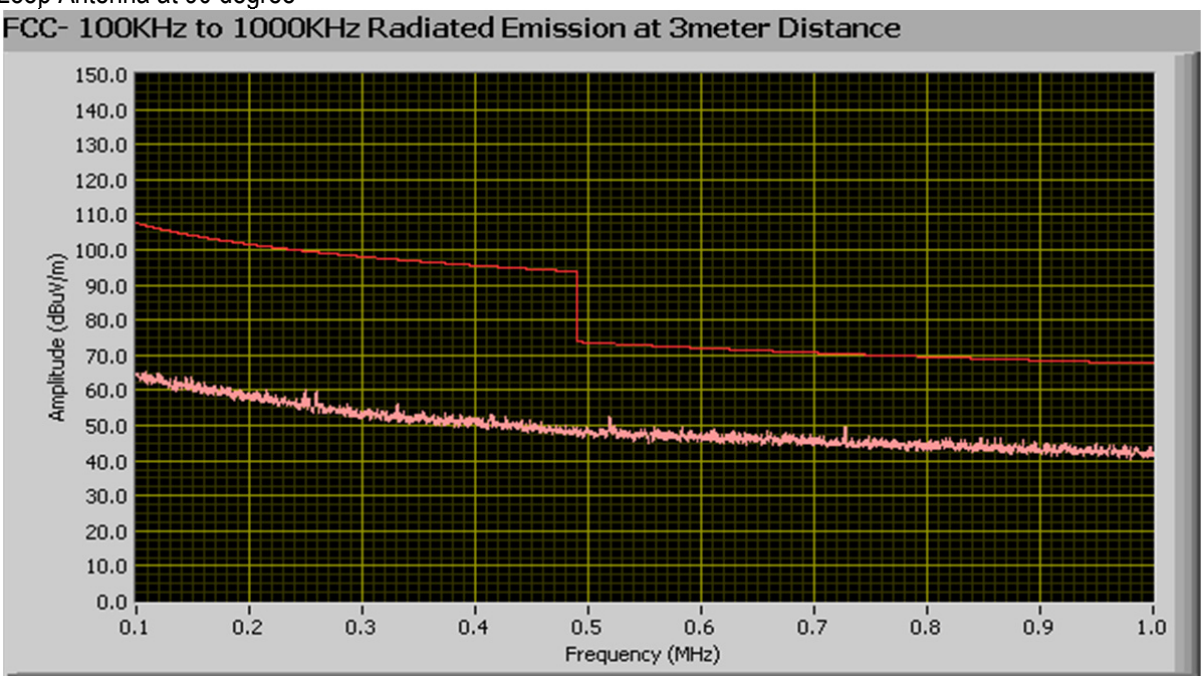
100 kHz ~ 1 MHz

General Emission Limit @ 3 Meter

Loop Antenna at 0 degree



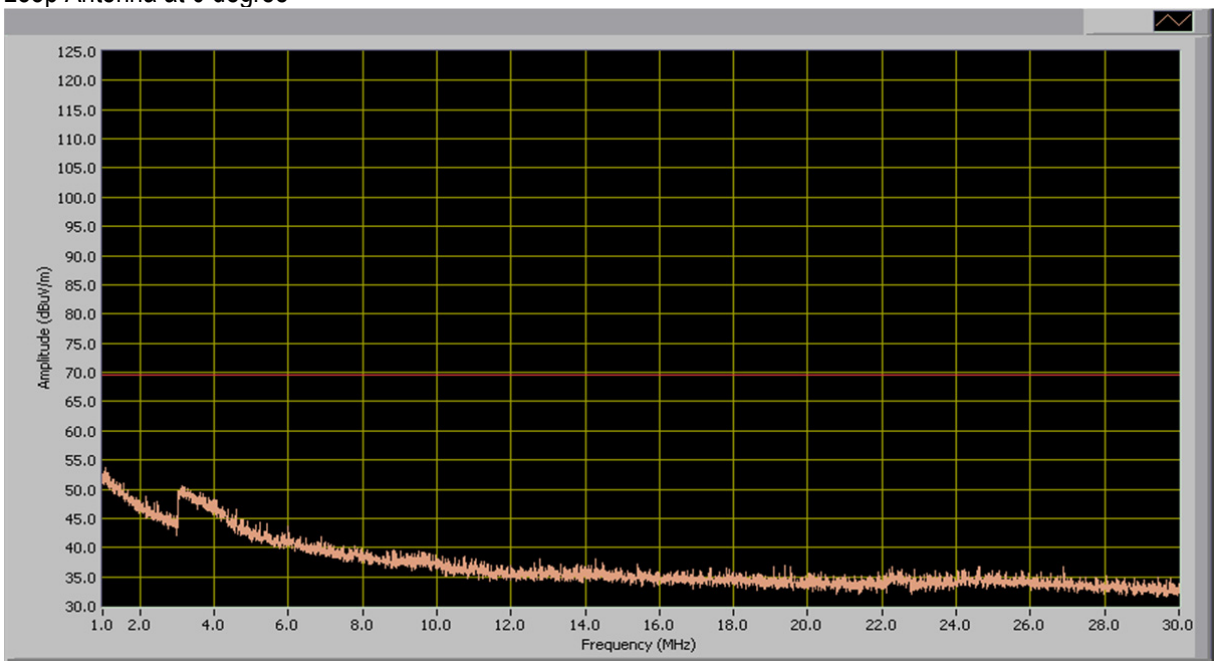
Loop Antenna at 90 degree



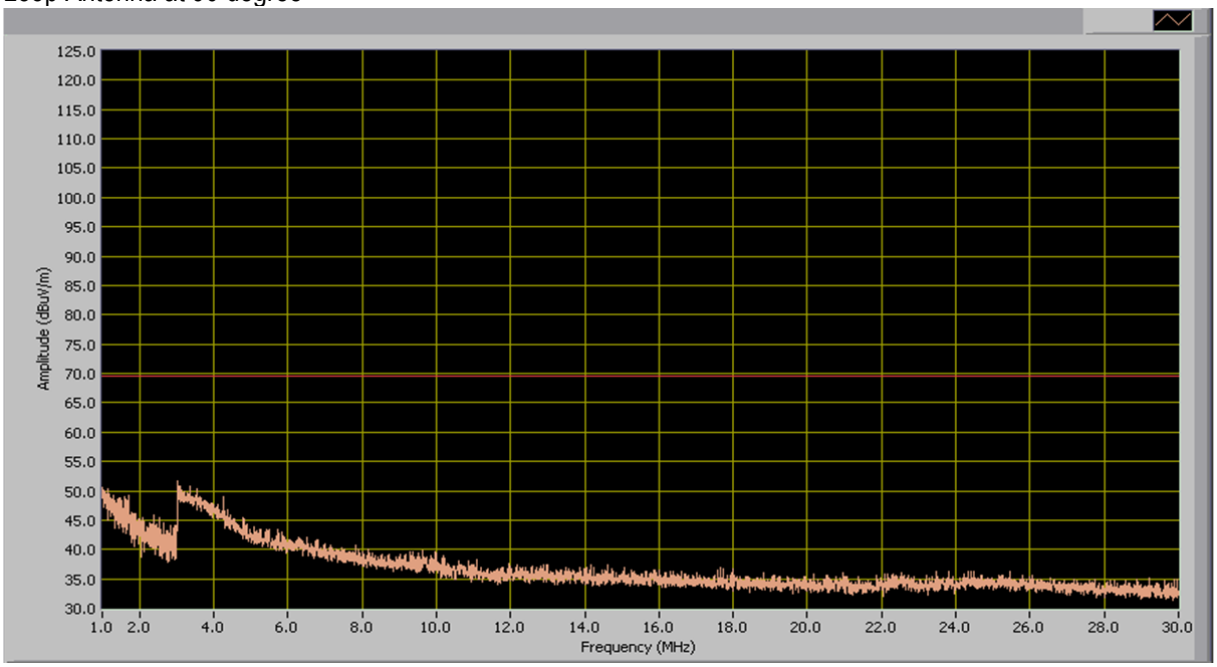
1MHz ~ 30MHz

General Emission Limit @ 3 meter

Loop Antenna at 0 degree



Loop Antenna at 90 degree



10.2.3 Frequency Stability

Requirement(s):

Spec	Item	Requirement	Applicable
47 CFR §2.1055 RSS210(2.1)	e)	Limit: ±0.01% of 125 kHz = 125 Hz	☒
Test Setup	1. The EUT and supporting equipment were set up in accordance with the requirements of the standard on top of a 1.5m X 1.0m X 0.8m high, non-metallic table. 2. The filtered power supply for the EUT and supporting equipment were tapped from the appropriate power sockets located on the turntable. 3. The relevant loop antenna was set at the required test distance away from the EUT and supporting equipment boundary.		
Procedure	Frequency Stability was measured according to 47 CFR §2.1055. Measurement was taken with spectrum analyzer. The spectrum analyzer bandwidth and span was set to read in hertz. A voltmeter was used to monitor when varying the voltage.		
Test Date	8/23/2013	Environmental condition	Temperature 24oC Relative Humidity 46% Atmospheric Pressure 1027mbar
Remark			
Result	☒ Pass ☐ Fail		

Test Data ☒ Yes (See below) ☐ N/A

Test Plot ☒ Yes (See below) ☐ N/A

Test Result for 125 KHz Radio

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

Reference Frequency: 125. 015030 KHz at -20°C and +50ºC

Temperature (ºC)	Measured Freq. (MHz)	Freq. Drift (Hz)	Freq. Deviation (Limit: 0.01%)	Pass/Fail
50	125.015030	0	<0.01	Pass
40	125.015030	0	<0.01	Pass
30	125.015030	0	<0.01	Pass
20	Reference (125. 015030 KHz)			
10	125.015030	0	<0.01	Pass
0	125.015030	0	<0.01	Pass
-10	125.015030	0	<0.01	Pass
-20	125.015030	0	<0.01	Pass

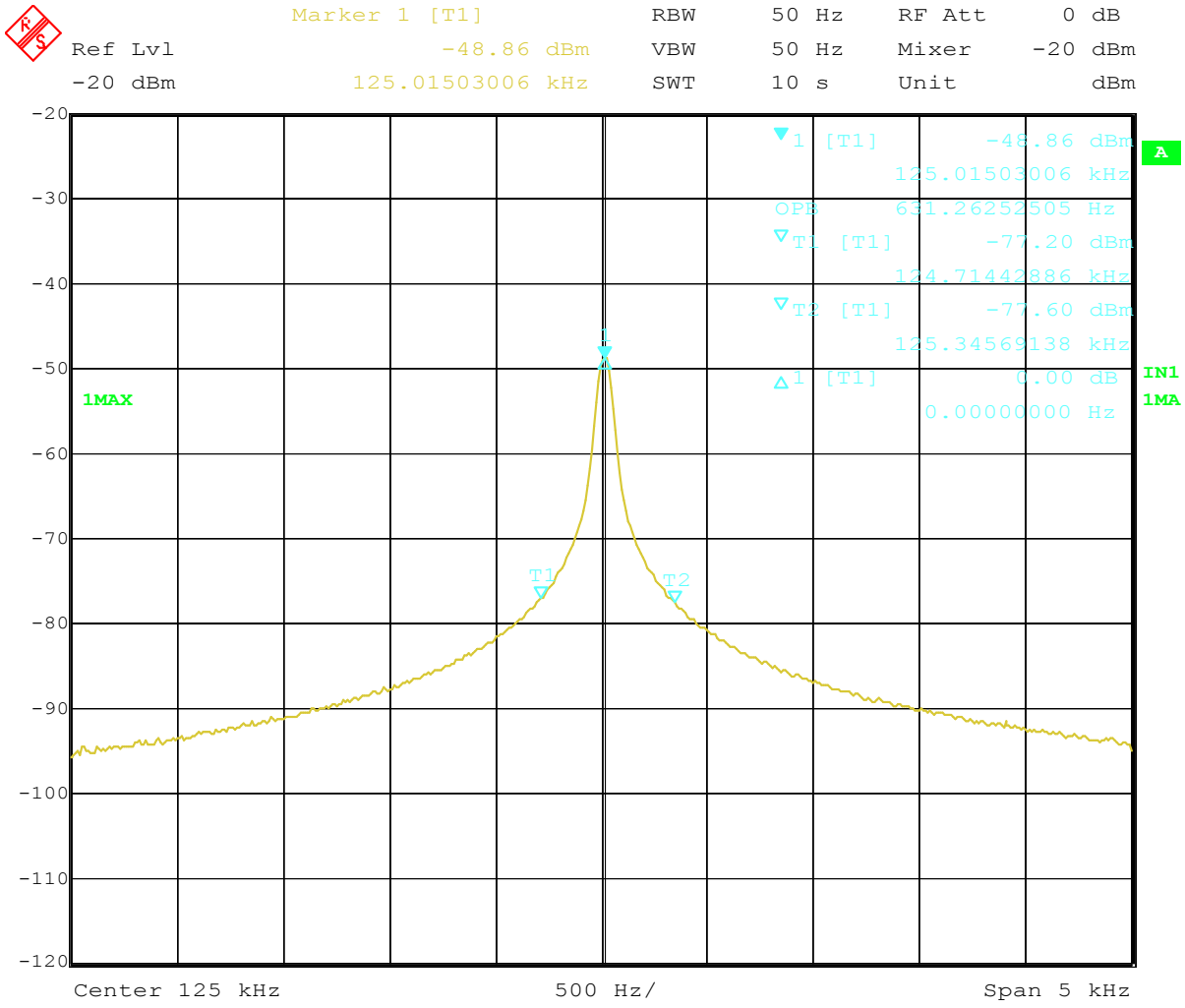
Frequency Stability versus Input Voltage: The Frequency tolerance of the carrier signal shall be maintained within ± 0.01%, the frequency of the transmitter was measured at 85% and at 115% of the rated power supply voltage at 20ºC environmental temperature.

Carrier Frequency: 125.015030 at 20°C at 5VDC

Measured Voltage ±15% of nominal (DC)	Measured Freq. (MHz)	Freq. Drift (Hz)	Freq. Deviation (Limit: 0.01%)	Pass/Fail
5.75	125.015030	0	<0.01	Pass
4.25	125.015030	0	<0.01	Pass

10.2.4 Occupied bandwidth

125 KHz



Annex A. TEST INSTRUMENT

Instrument	Model	Serial #	Cal Date	Cal Cycle	Cal Due	In use
Conducted Emissions						
R & S Receiver	ESIB 40	100179	04/20/2013	1 Year	04/20/2014	☑
R&S LISN	ESH2-Z5	861741/013	05/18/2013	1 Year	05/18/2014	☐
CHASE LISN	MN2050B	1018	07/24/2013	1 Year	07/24/2014	☑
Sekonic Hygro Hermograph	ST-50	HE01-000092	05/25/2013	1 Year	05/25/2014	☑
Radiated Emissions						
R & S Receiver	ESL6	100178	03/01/2013	1 Year	03/01/2014	☑
R & S Receiver	ESIB 40	100179	04/20/2013	1 Year	04/20/2014	☐
Passive Loop Antenna (10k-30MHz)	6512	49120	5/22/2013	1 Year	5/22/2014	☑
Bi-Log antenna (30MHz~2GHz)	JB1	A030702	02/09/2013	1 Year	02/09/2014	☑
Horn Antenna (1-26.5GHz)	3115	10SL0059	04/26/2013	1 Year	04/26/2014	☐
Microwave Preamplifier (18-40 GHz)	PA-840	181251	05/30/2013	1 Year	05/30/2014	☐
3 Meters SAC	3M	N/A	10/13/2012	1 Year	10/13/2013	☐
10 Meters SAC	10M	N/A	06/05/2013	1 Year	06/05/2014	☑
Sekonic Hygro Hermograph	ST-50	HE01-000092	05/25/2013	1 Year	05/25/2014	☑
Frequency tolerance						
Spectrum Analyzer	8564E	3738A00962	5/20/2013	1 Year	05/20/2014	☑
TestEquity Environment Chamber	1007H	61201	07/05/2013	1 Year	07/05/2014	☑

Annex B. USER MANUAL, BLOCK & CIRCUIT DIAGRAM

Please see attachment

Annex C. SIEMIC Accreditation

Accreditations	Document	Scope / Remark
ISO 17025 (A2LA)		Please see the documents for the detailed scope
ISO Guide 65 (A2LA)		Please see the documents for the detailed scope
TCB Designation		A1, A2, A3, A4, B1, B2, B3, B4, C
FCC DoC Accreditation		FCC Declaration of Conformity Accreditation
FCC Site Registration		3 meter site
FCC Site Registration		10 meter site
IC Site Registration		3 meter site
IC Site Registration		10 meter site
EU NB		**Radio & Telecommunications Terminal Equipment:** EN45001 – EN ISO/IEC 17025
		Electromagnetic Compatibility: EN45001 – EN ISO/IEC 17025
Singapore iDA CB(Certification Body)		Phase I, Phase II
Vietnam MIC CAB Accreditation		Please see the document for the detailed scope
Hong Kong OFCA		**(Phase II)** OFCA Foreign Certification Body for Radio and Telecom
		(Phase I) Conformity Assessment Body for Radio and Telecom
Industry Canada CAB		**Radio:** Scope A – All Radio Standard Specification in Category I
		Telecom: CS-03 Part I, II, V, VI, VII, VIII

Japan Recognized Certification Body Designation		**Radio** : A1. Terminal equipment for purpose of calling **Telecom** : B1. Specified radio equipment specified in Article 38-2, Paragraph 1, Item 1 of the Radio Law
Korea CAB Accreditation		**EMI:** KCC Notice 2008-39, RRL Notice 2008-3: CA Procedures for EMI KN22: Test Method for EMI**EMS:** KCC Notice 2008-38, RRL Notice 2008-4: CA Procedures for EMS KN24, KN61000-4-2, -4-3, -4-4, -4-5, -4-6, -4-8, -4-11: Test Method for EMS
		Radio: RRL Notice 2008-26, RRL Notice 2008-2, RRL Notice 2008-10, RRL Notice 2007-49, RRL Notice 2007-20, RRL Notice 2007-21, RRL Notice 2007-80, RRL Notice 2004-68
		Telecom: President Notice 20664, RRL Notice 2007-30, RRL Notice 2008-7 with attachments 1, 3, 5, 6; President Notice 20664, RRL Notice 2008-7 with attachment 4
Taiwan NCC CAB Recognition		LP0002, PSTN01, ADSL01, ID0002, IS6100, CNS14336, PLMN07, PLMN01, PLMN08
Taiwan BSMI CAB Recognition		CNS 13438
Japan VCCI		R-3083: Radiation 3 meter site C-3421: Main Ports Conducted Interference Measurement T-1597: Telecommunication Ports Conducted Interference Measurement
Australia CAB Recognition		**EMC:** AS/NZS CISPR 11, AS/NZS CISPR 14.1, AS/NZS CISPR22, AS/NZS 61000.6.3, AS/NZS 61000.6.4
		Radio communications: AS/NZS 4281, AS/NZS 4268, AS/NZS 4280.1, AS/NZS 4280.2, AS/NZS 4295, AS/NZS 4582, AS/NZS 4583, AS/NZS 4769.1, AS/NZS 4769.2, AS/NZS 4770, AS/NZS 4771
		Telecommunications: AS/ACIF S002:05, AS/ACIF S003:06, AS/ACIF S004:06 AS/ACIF S006:01, AS/ACIF S016:01, AS/ACIF S031:01, AS/ACIF S038:01, AS/ACIF S040:01, AS/ACIF S041:05, AS/ACIF S043.2:06, AS/ACIF S60950.1
Australia NATA Recognition		AS/ACIF S002, AS/ACIF S003, AS/ACIF S004, AS/ACIF S006, AS/ACIF S016,AS/ACIF S031, AS/ACIF S038, AS/ACIF S040, AS/ACIF S041, AS/ACIF S043.2

This page has been left blank intentionally.