

FCC Test Report

Product Name	Key programming device
Model No.	KeyReader Plus
FCC ID	QLXKRP

Applicant	TeraTron GmbH
Address	Bunsenstr. 10, 51647 Gummersbach, Germany

Date of Receipt	Aug. 02, 2016
Issued Date	Jan. 06, 2017
Report No.	1680089R-RFUSP17V00
Report Version	V1.0



The test results relate only to the samples tested.

The test results shown in the test report are traceable to the national/international standard through the calibration report of the equipment and evaluated measurement uncertainty herein.

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Test Report

Issued Date: Jan. 06, 2017

Report No.: 1680089R-RFUSP17V00



Product Name	Key programming device
Applicant	TeraTron GmbH
Address	Bunsenstr. 10, 51647 Gummersbach, Germany
Manufacturer	TeraTron GmbH
Model No.	KeyReader Plus
FCC ID.	QLXKRP
EUT Rated Voltage	DC 3.6V (Power by Battery)
EUT Test Voltage	DC 3.6V (Power by Battery)
Trade Name	TeraTron
Applicable Standard	FCC CFR Title 47 Part 15 Subpart C: 2015 ANSI C63.4: 2014, ANSI C63.10: 2013
Test Result	Complied

Documented By :



(Senior Adm. Specialist / Leven Huang)

Tested By :



(Engineer / Eason Chen)

Approved By :



(Director / Vincent Lin)

TABLE OF CONTENTS

Description	Page
1. GENERAL INFORMATION	4
1.1. EUT Description.....	4
1.2. Operational Description	5
1.3. Tested System Details	6
1.4. Configuration of tested System	6
1.5. EUT Exercise Software	6
1.6. Test Facility	7
1.7. List of Test Equipment	8
2. Conducted Emission.....	9
2.1. Test Setup	9
2.2. Limits	10
2.3. Test Procedure	10
2.4. Uncertainty	10
2.5. Test Result of Conducted Emission.....	11
3. Radiated Emission.....	13
3.1. Test Setup	13
3.2. Limits	14
3.3. Test Procedure	15
3.4. Uncertainty	16
3.5. Test Result of Radiated Emission.....	17
4. Band Edge	25
4.1. Test Setup	25
4.2. Limits	26
4.3. Test Procedure	26
4.4. Uncertainty	26
4.5. Test Result of Band Edge	27
5. Frequency Tolerance	28
5.1. Test Setup	28
5.2. Limits	28
5.3. Test Procedure	28
5.4. Uncertainty	28
5.5. Test Result of Frequency Stability	29
6. EMI Reduction Method During Compliance Testing	31
Attachment 1: EUT Test Photographs	
Attachment 2: EUT Detailed Photographs	

1. GENERAL INFORMATION

1.1. EUT Description

Product Name	Key programming device
Trade Name	TeraTron
Model No.	KeyReader Plus
FCC ID	QLXKRP
Frequency Range	13.56MHz
Modulation	ASK
Antenna Type	Loop Antenna
USB Cable	Shielded, 2m

Frequency of Each Channel:

Channel	Frequency
Channel 1:	13.56 MHz

Note:

1. This device is a Key programming device with built-in 13.56MHz transceiver.
2. These tests were conducted on a sample of the equipment for the purpose of demonstrating compliance with Part 15 Subpart C Paragraph 15.225
3. The radiation measurements are performed in X, Y, Z axis positioning. Only the worst case is shown in the report.

Test Mode	Mode 1: Transmit
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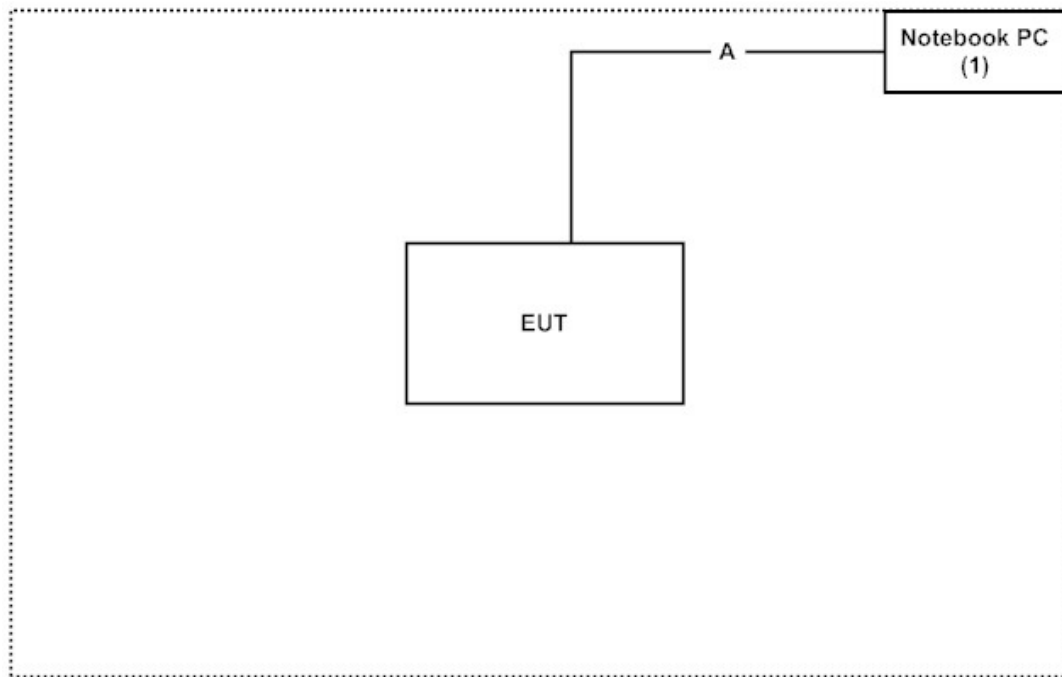
1.3. Tested System Details

The types for all equipment, plus descriptions of all cables used in the tested system (including inserted cards) are:

	Product	Manufacturer	Model No.	Serial No.	Power Cord
1	Notebook PC	ASUS	X206H	X206HA	Non-Shielded, 1.8m

	Signal Cable Type	Signal cable Description
A	USB Cable	Shielded, 2m

1.4. Configuration of tested System



1.5. EUT Exercise Software

- (1) Setup the EUT as shown in Section 1.4
- (2) Turn on the power of all equipment.
- (3) Start the continuous transmitter.
- (4) Verify that the EUT works properly.

1.6. Test Facility

Ambient conditions in the laboratory:

Items	Required (IEC 68-1)	Actual
Temperature (°C)	15-35	20-35
Humidity (%RH)	25-75	50-65
Barometric pressure (mbar)	860-1060	950-1000

The related certificate for our laboratories about the test site and management system can be downloaded from DEKRA Testing and Certification Co., Ltd. Web Site:

<http://www.dekra.com.tw/chinese/about/certificates.aspx?bval=5>

The address and introduction of DEKRA Testing and Certification Co., Ltd. laboratories can be founded in our Web site: [http:// www.dekra.com.tw](http://www.dekra.com.tw)

Site Description: Accredited by TAF
Accredited Number: 3023

Site Name: DEKRA Testing and Certification Co., Ltd
Site Address: No.5-22, Ruishukeng, Linkou Dist., New Taipei City 24451,
Taiwan, R.O.C.
TEL : 886-2-8601-3788 / FAX : 886-2-8601-3789
E-Mail : info.tw@dekra.com

FCC Accreditation Number: TW1014

1.7. List of Test Equipment

For Conducted measurements /CB3/SR8

	Equipment	Manufacturer	Model No.	Serial No.	Cali. Data	Due. Data
	Temperature Chamber	WIT GROUP	TH-1S-B	EQ-201-00146	2016/11/28	2017/11/27
X	Spectrum Analyzer	Agilent	N9010A	MY48030495	2016/7/22	2017/7/21
X	Power Meter	Anritsu	ML2495A	6K00003357	2016/6/23	2017/6/22
X	Pulse power sensor	Anritsu	MA2411B	0846193	2016/6/23	2017/6/22
X	EMI Test Receiver	R&S	ESCS 30	100369	2016/10/13	2017/10/12
X	LISN	R&S	ESH3-Z5	836679/017	2017/1/7	2018/1/6
X	LISN	R&S	ENV216	100097	2017/1/7	2018/1/6
X	Coaxial Cable	QTK(Arnist)	RG 400	LC018-RG	2016/6/25	2017/6/24

For Radiated measurements /Site3/CB8

	Equipment	Manufacturer	Model No.	Serial No.	Cali. Data	Due. Data
X	Spectrum Analyzer	R&S	FSP40	100170	2017/1/5	2018/1/4
X	Loop Antenna	Teseq	HLA6121	37133	2016/3/18	2017/3/17
X	Bi-Log Antenna	Schaffner Chase	CBL6112B	2707	2016/6/11	2017/6/10
	<u>Horn Antenna</u>	ETS-Lindgren	3117	00135205	2016/4/6	2017/4/5
	<u>Horn Antenna</u>	Schwarzbeck	BBHA9170	9170430	2016/1/11	2017/1/10
X	<u>Pre-Amplifier</u>	QTK	AP/0100A	CHM/0901069	2016/6/23	2017/6/22
	<u>Pre-Amplifier</u>	EMCI	EMC012630SE	980210	2016/1/26	2017/1/24
	<u>Pre-Amplifier</u>	NARDA WE	DBL-1840N506	013	2016/9/30	2017/9/29
	Filter	MicroTRON	BRM50701	019	2016/11/2	2017/11/1
	Filter	Microwave Circuits	N0257881	36681	2016/12/7	2017/12/6
X	EMI Test Receiver	R&S	ESR26	101385	2016/9/29	2017/9/28
X	Coaxial Cable	QTK(Arnist)	SUCOFLEX 106	L1606-015C	2016/6/23	2017/6/22
X	EMI Test Receiver	R&S	ESCS 30	838251/001	2016/7/21	2017/7/20
X	Coaxial Cable	QTK(Arnist)	RG 214	LC003-RG	2016/6/16	2017/6/15
X	Coaxial signal switch	Anritsu	MP59B	6201415889	2016/6/16	2017/6/15

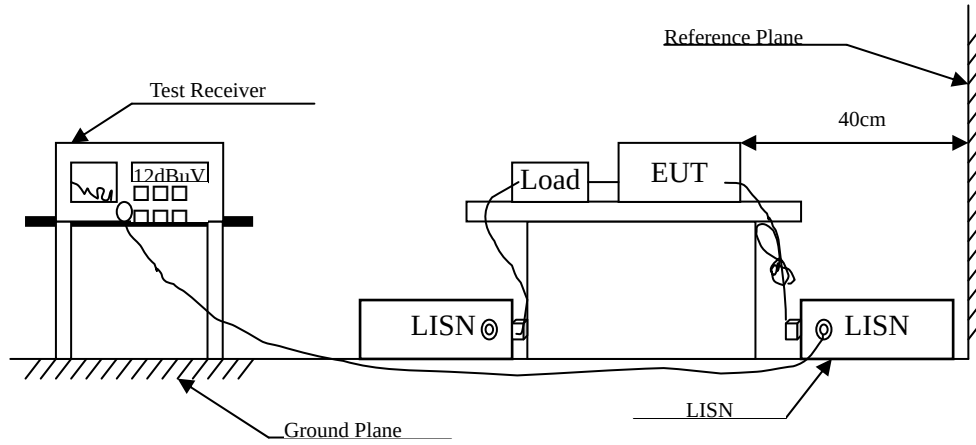
Note:

1. All equipments are calibrated every one year.
2. The test instruments marked with "X" are used to measure the final test results.

Test Software version :QuiTek EMI 2.0 V2.1.113.

2. Conducted Emission

2.1. Test Setup



2.2. Limits

FCC Part 15 Subpart C Paragraph 15.207 (dBuV) Limit		
Frequency MHz	Limits	
	QP	AV
0.15 - 0.50	66-56 _(註)	56-46 _(註)
0.50-5.0	56	46
5.0 - 30	60	50

2.3. Test Procedure

The EUT and simulators are connected to the main power through a line impedance stabilization network (L.I.S.N.). This provides a 50 ohm /50uH coupling impedance for the measuring equipment. The peripheral devices are also connected to the main power through a LISN that provides a 50ohm /50uH coupling impedance with 50ohm termination. (Please refers to the block diagram of the test setup and photographs.)

Both sides of A.C. line are checked for maximum conducted interference. In order to find the maximum emission, the relative positions of equipment and all of the interface cables must be changed according to ANSI C63.4: 2014 on conducted measurement.

Conducted emissions were investigated over the frequency range from 0.15MHz to 30MHz using a receiver bandwidth of 9kHz.

2.4. Uncertainty

± 2.26 dB

2.5. Test Result of Conducted Emission

Product : Key programming device
 Test Item : Conducted Emission Test
 Power Line : Line 1
 Test date : 2016.8.9
 Test Mode : Mode 1: Transmit

Frequency	Correct	Reading	Measurement	Margin	Limit
MHz	Factor	Level	Level		
	dB	dBuV	dBuV	dB	dBuV
LINE 1					
Quasi-Peak					
0.170	9.681	38.760	48.442	-16.987	65.429
0.263	9.678	23.770	33.448	-29.323	62.771
0.470	9.675	31.220	40.895	-15.962	56.857
1.498	9.723	8.550	18.274	-37.726	56.000
3.115	9.768	14.250	24.018	-31.982	56.000
6.877	9.834	19.510	29.344	-30.656	60.000
Average					
0.170	9.681	25.640	35.322	-20.107	55.429
0.263	9.678	12.380	22.058	-30.713	52.771
0.470	9.675	25.250	34.925	-11.932	46.857
1.498	9.723	2.100	11.824	-34.176	46.000
3.115	9.768	7.670	17.438	-28.562	46.000
6.877	9.834	13.660	23.494	-26.506	50.000

Note:

1. All Reading Levels are Quasi-Peak and average value.
2. “” means the worst emission level.
3. Measurement Level = Reading Level + Correct Factor

Product : Key programming device
 Test Item : Conducted Emission Test
 Power Line : Line 2
 Test date : 2016.8.9
 Test Mode : Mode 1: Transmit

Frequency	Correct	Reading	Measurement	Margin	Limit
MHz	Factor	Level	Level		
	dB	dBuV	dBuV	dB	dBuV
LINE 2					
Quasi-Peak					
0.193	9.736	31.510	41.246	-23.525	64.771
0.459	9.744	31.380	41.124	-16.047	57.171
1.998	9.803	19.610	29.413	-26.587	56.000
3.545	9.842	18.930	28.772	-27.228	56.000
4.529	9.862	20.560	30.422	-25.578	56.000
14.927	10.083	13.120	23.203	-36.797	60.000
Average					
0.193	9.736	23.450	33.186	-21.585	54.771
0.459	9.744	21.620	31.364	-15.807	47.171
1.998	9.803	13.210	23.013	-22.987	46.000
3.545	9.842	12.540	22.382	-23.618	46.000
4.529	9.862	12.510	22.372	-23.628	46.000
14.927	10.083	7.580	17.663	-32.337	50.000

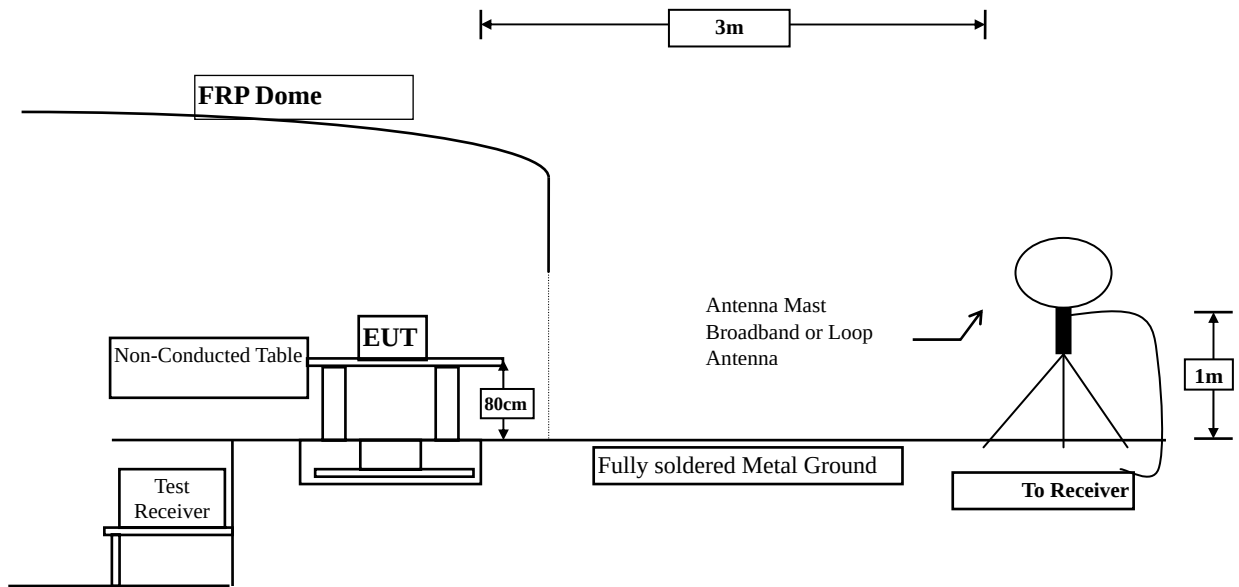
Note:

1. All Reading Levels are Quasi-Peak and average value.
2. “ ” means the worst emission level.
3. Measurement Level = Reading Level + Correct Factor

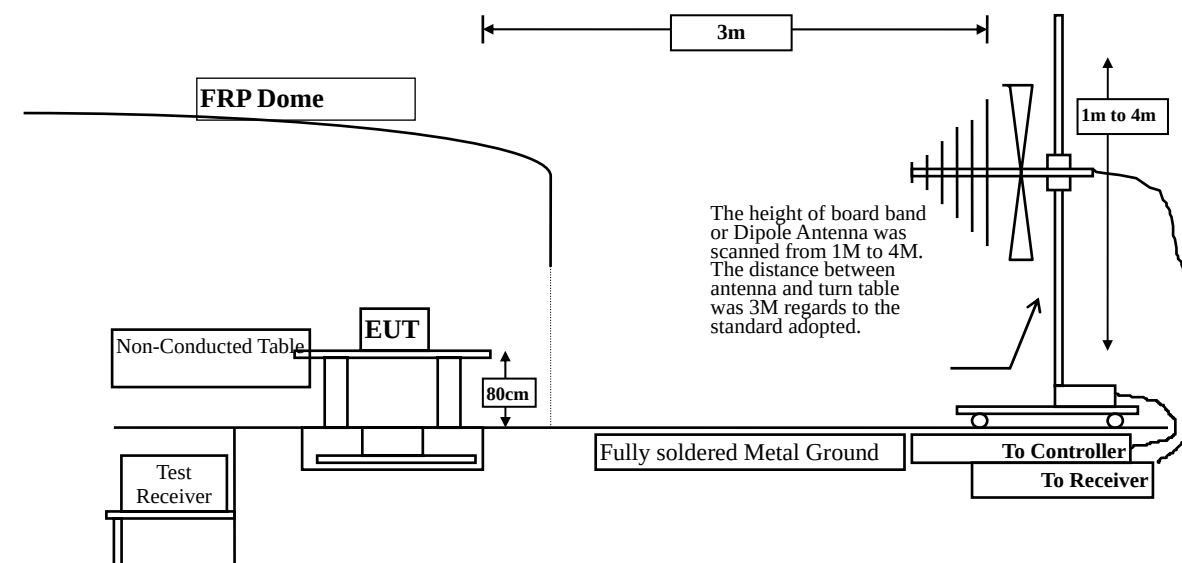
3. Radiated Emission

3.1. Test Setup

9kHz~30MHz



30MHz~1GHz



3.2. Limits

➤ Fundamental electric field strength Limit

FCC Part 15 Subpart C Paragraph 15.225 Limits				
Fundamental Frequency MHz	Field strength of fundamental			
	uV/m	Distance (meter)	dBuV/m	Distance (meter)
13.553 – 13.567	15848	30	124	3
13.410 – 13.553 and 13.567 – 13.710	334	30	90.47	3
13.110 – 13.410 and 13.710 – 14.010	106	30	80.50	3
Outside of the 13.110 – 14.010	See 15.209 Limits			

Remarks : 1. RF Voltage (dBuV) = 20 log RF Voltage (uV)

2. Distance refers to the distance in meters between the measuring instrument antenna and the closed point of any part of the device or system.

3. The emission limit in this paragraph is based on measurement instrumentation employing an average detector.

➤ Spurious electric field strength Limit

FCC Part 15 Subpart C Paragraph 15.209 Limits			
Frequency MHz	uV/m	dBuV/m	Measurement distance (meter)
0.009-0.490	2400/F(kHz)	See Remark ¹	300
0.490-1.705	24000/F(kHz)	See Remark ¹	30
1.705-30	30	29.5	30
30-88	100	40	3
88-216	150	43.5	3
216-960	200	46	3
Above 960	500	54	3

Remarks : 1. RF Voltage (dBuV) = 20 log RF Voltage (uV)
 2. In the Above Table, the tighter limit applies at the band edges.
 3. Distance refers to the distance in meters between the measuring instrument antenna and the closed point of any part of the device or system.

3.3. Test Procedure

Fundamental electric field strength:

The EUT and its simulators are placed on a turn table which is 1 meter above ground. The turn table can rotate 360 degrees to determine the position of the maximum electric field strength.

The EUT was positioned such that the distance from antenna to the EUT was 3 meters.

The antenna which is 1 meter above ground. All X-axis, Y-axis and Z-axis polarization of the antenna are set on measurement.

Spurious electric field strength:

The EUT and its simulators are placed on a turn table which is 0.8 meter above ground. The turn table can rotate 360 degrees to determine the position of the maximum emission level.

The antenna can move up and down between 1 meter and 4 meters to find out the maximum emission level. The EUT was positioned such that the distance from antenna to the EUT was 3 meters.

Both horizontal and vertical polarization of the antenna are set on measurement. In order to find the maximum emission, all of the interface cables must be manipulated according to ANSI C6310: 2013 on radiated measurement.

On any frequency the radiated limits shown are based upon the use of measurement instrumentation employing an average detector function. When average radiated emission measurement are included emission measurement below 1000 MHz, there also is a limit on the radio frequency emissions, as

measured using instrumentation with a peak detector function, corresponding to 20 dB above the maximum permitted average limit.

The bandwidth below 30MHz setting on the field strength meter is 9kHz and above 30MHz is 120kHz.

The frequency range from 9kHz to 10th harmonics is checked.

3.4. Uncertainty

± 4.08 dB above 1GHz

± 4.22 dB below 1GHz

3.5. Test Result of Radiated Emission

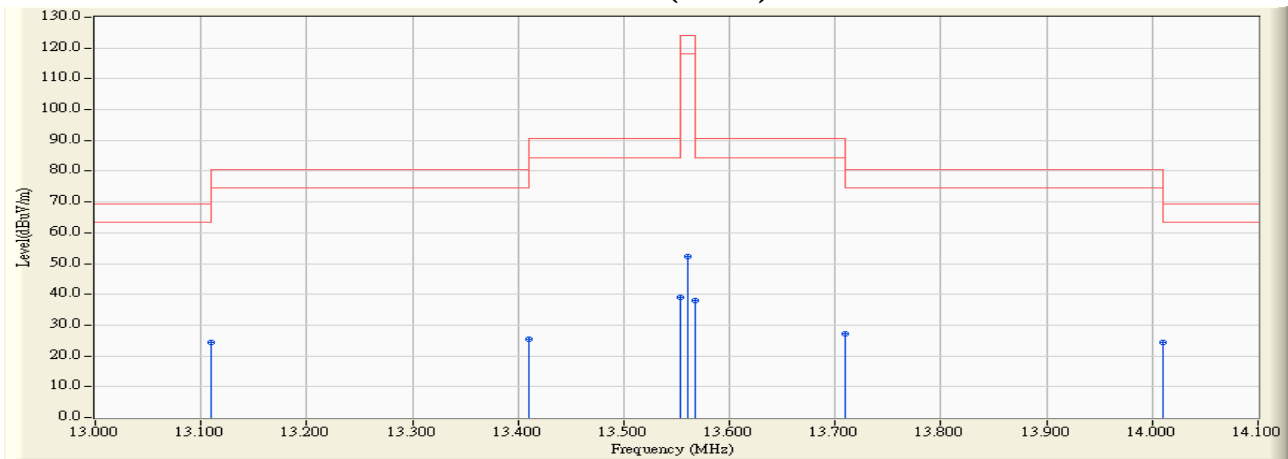
Product : Key programming device
 Test Item : Fundamental Radiated Emission
 Test Site : No.3 OATS
 Test date : 2016.8.9
 Test Mode : Mode 1: Transmit- X-axis

Frequency	Correct	Reading	Measurement	Margin	Limit
MHz	Factor	Level	Level		
	dB	dBuV	dBuV/m	dB	dBuV/m
X-axis					
Quasi-Peak					
Horizontal					
13.110	20.020	4.400	24.420	-45.080	69.500
13.410	20.020	5.400	25.420	-55.080	80.500
13.553	20.020	19.100	39.120	-51.380	90.500
13.560	20.020	32.200	52.220	-71.780	124.000
13.567	20.020	18.100	38.120	-52.380	90.500
13.710	20.020	7.100	27.120	-53.380	80.500
14.010	20.020	4.400	24.420	-45.080	69.500
Vertical					
13.110	20.020	4.900	24.920	-44.580	69.500
13.410	20.020	6.100	26.120	-54.380	80.500
13.553	20.020	21.000	41.020	-49.480	90.500
13.560	20.020	35.400	55.420	-68.580	124.000
13.567	20.020	20.900	40.920	-49.580	90.500
13.710	20.020	8.600	28.620	-51.880	80.500
14.010	20.020	5.000	25.020	-44.480	69.500

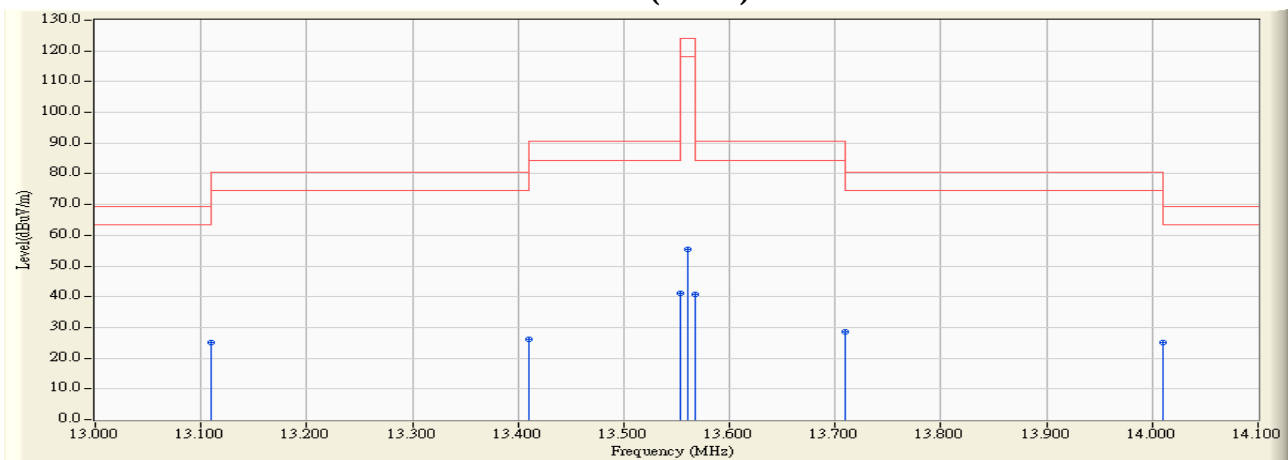
Note:

1. Limit=84dBuV/m + 40*Log (30(m)/3(m))=124dBuV/m
2. All Readings below 1GHz are Quasi-Peak, above are average value.
3. Measurement Level = Reading Level + Correct Factor.
4. The average measurement was not performed when the peak measured data under the limit of average detection. If the readings given are average, peak measurement should also be supplied.

Horizontal (X-axis)



Vertical (X-axis)



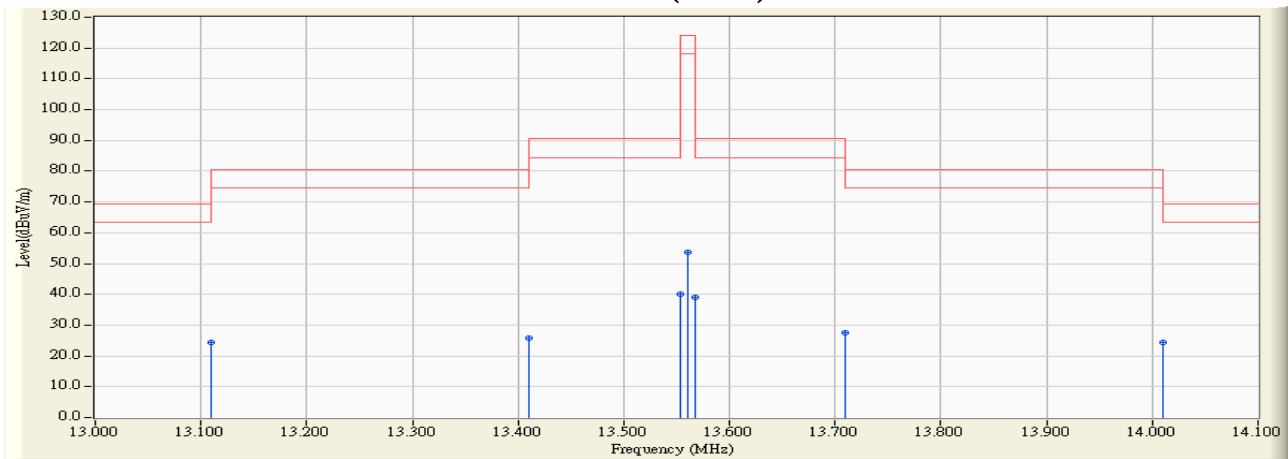
Product : Key programming device
 Test Item : Fundamental Radiated Emission
 Test Site : No.3 OATS
 Test date : 2016.8.9
 Test Mode : Mode 1: Transmit- Y-axis

Frequency	Correct	Reading	Measurement	Margin	Limit
	Factor	Level	Level		
MHz	dB	dBuV	dBuV/m	dB	dBuV/m
Y-axis					
Quasi-Peak					
Horizontal					
13.110	20.020	4.300	24.320	-45.180	69.500
13.410	20.020	5.900	25.920	-54.580	80.500
13.553	20.020	20.100	40.120	-50.380	90.500
13.560	20.020	33.500	53.520	-70.480	124.000
13.567	20.020	19.100	39.120	-51.380	90.500
13.710	20.020	7.400	27.420	-53.080	80.500
14.010	20.020	4.400	24.420	-45.080	69.500
Vertical					
13.110	20.020	4.900	24.920	-44.580	69.500
13.410	20.020	6.700	26.720	-53.780	80.500
13.553	20.020	22.600	42.620	-47.880	90.500
13.560	20.020	34.000	54.020	-69.980	124.000
13.567	20.020	21.500	41.520	-48.980	90.500
13.710	20.020	8.000	28.020	-52.480	80.500
14.010	20.020	5.300	25.320	-44.180	69.500

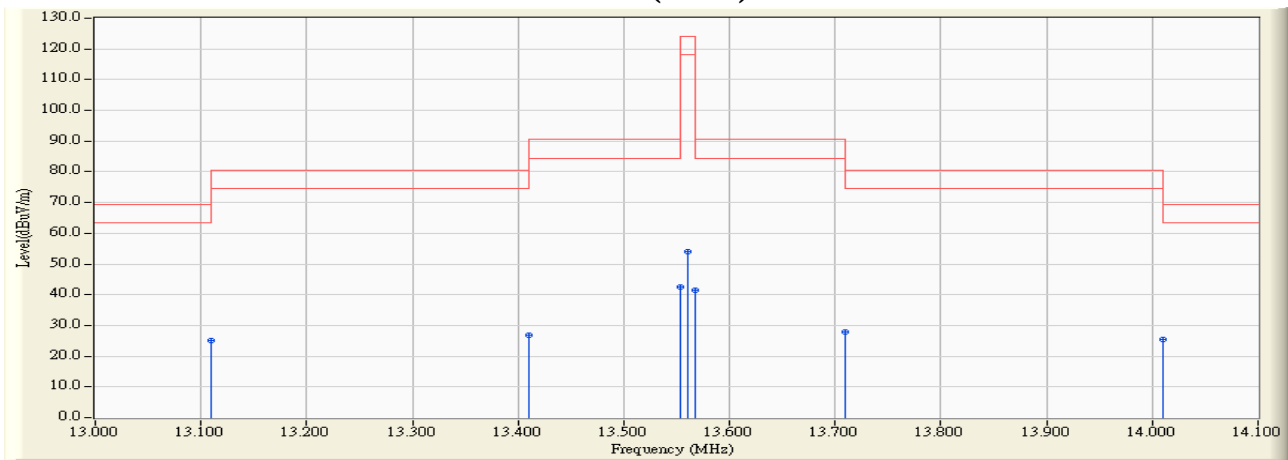
Note:

1. Limit=84dBuV/m + 40*Log (30(m)/3(m))=124dBuV/m
2. All Readings below 1GHz are Quasi-Peak, above are average value.
3. Measurement Level = Reading Level + Correct Factor.
4. The average measurement was not performed when the peak measured data under the limit of average detection. If the readings given are average, peak measurement should also be supplied.

Horizontal (Y-axis)



Vertical (Y-axis)



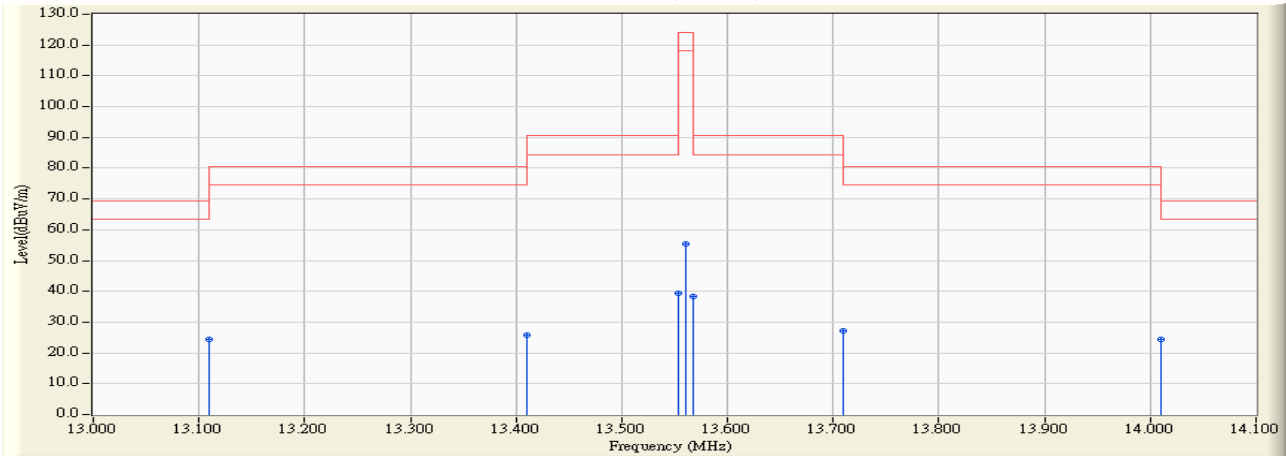
Product : Key programming device
 Test Item : Fundamental Radiated Emission
 Test Site : No.3 OATS
 Test date : 2016.8.9
 Test Mode : Mode 1: Transmit- Z-axis

Frequency	Correct	Reading	Measurement	Margin	Limit
	Factor	Level	Level		
MHz	dB	dBuV	dBuV/m	dB	dBuV/m
Z-axis					
Quasi-Peak					
Horizontal					
13.110	20.020	4.400	24.420	-45.080	69.500
13.410	20.020	5.700	25.720	-54.780	80.500
13.553	20.020	19.500	39.520	-50.980	90.500
13.560	20.020	35.500	55.520	-68.480	124.000
13.567	20.020	18.400	38.420	-52.080	90.500
13.710	20.020	7.100	27.120	-53.380	80.500
14.010	20.020	4.300	24.320	-45.180	69.500
Vertical					
13.110	20.020	4.600	24.620	-44.880	69.500
13.410	20.020	7.300	27.320	-53.180	80.500
13.553	20.020	19.900	39.920	-50.580	90.500
13.560	20.020	33.400	53.420	-70.580	124.000
13.567	20.020	19.200	39.220	-51.280	90.500
13.710	20.020	7.500	27.520	-52.980	80.500
14.010	20.020	4.700	24.720	-44.780	69.500

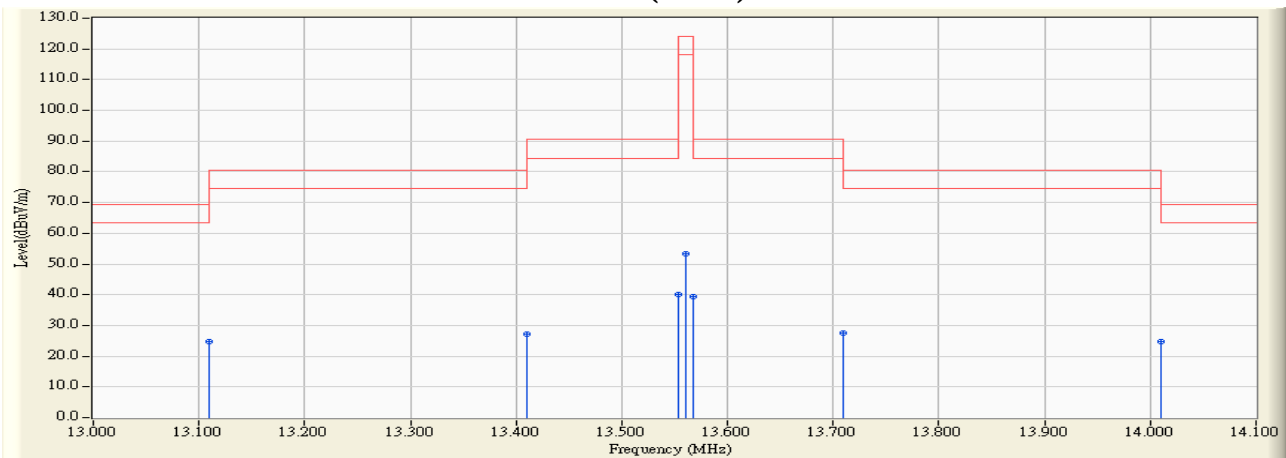
Note:

1. Limit=84dBuV/m + 40*Log (30(m)/3(m))=124dBuV/m
2. All Readings below 1GHz are Quasi-Peak, above are average value.
3. Measurement Level = Reading Level + Correct Factor.
4. The average measurement was not performed when the peak measured data under the limit of average detection. If the readings given are average, peak measurement should also be supplied.

Horizontal (Z-axis)



Vertical (Z-axis)



Product : Key programming device
 Test Item : General Radiated Emission Data (below 30MHz)
 Test Site : No.3 OATS
 Test date : 2016.8.9
 Test Mode : Mode 1: Transmit

Frequency	Correct	Reading	Measurement	Margin	Limit
	Factor	Level	Level		
MHz	dB	dBuV	dBuV/m	dB	dBuV/m
Horizontal					
27.120	20.200	3.000	23.200	-46.340	69.540
Vertical					
27.120	20.200	6.300	26.500	-43.040	69.540

Note:

1. Limit=29.54dBuV/m + 40*Log (30(m)/3(m))=69.54dBuV/m
2. All Readings below 1GHz are Quasi-Peak, above are average value.
3. "■" means the worst emission level.
4. Measurement Level = Reading Level + Correct Factor.

Product : Key programming device
 Test Item : General Radiated Emission Data (above 30MHz)
 Test Site : No.3 OATS
 Test date : 2016.8.9
 Test Mode : Mode 1: Transmit

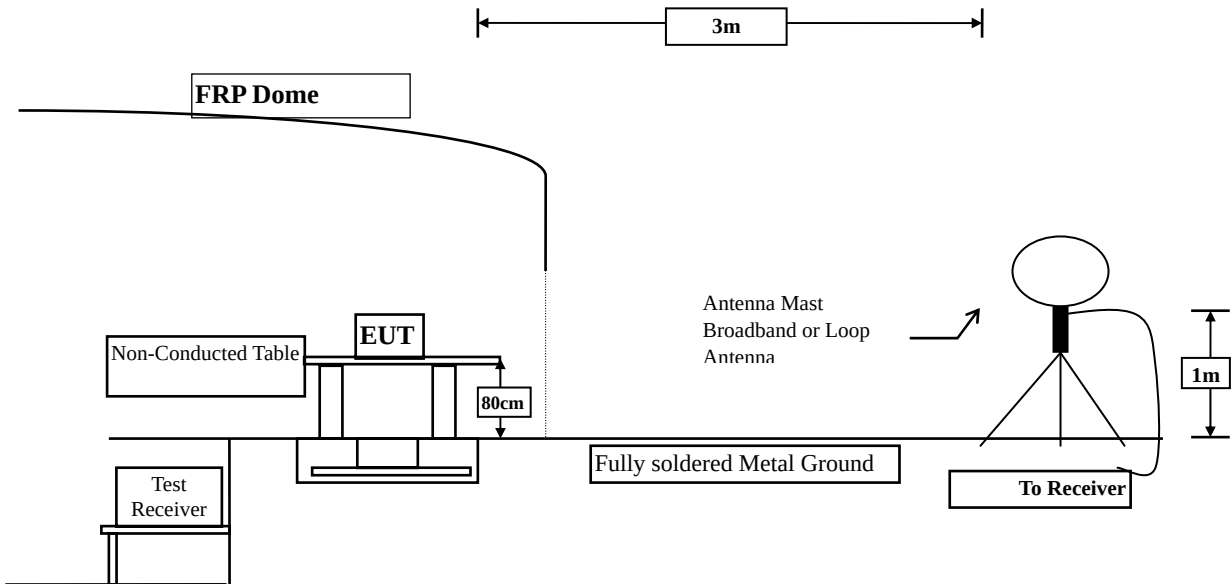
Frequency	Correct	Reading	Measurement	Margin	Limit
MHz	Factor	Level	Level		
	dB	dBuV	dBuV/m	dB	dBuV/m
Horizontal					
QP Detector					
66.551	-13.054	38.259	25.205	-14.795	40.000
270.391	-11.143	40.168	29.025	-16.975	46.000
325.217	-9.580	42.711	33.130	-12.870	46.000
380.043	-8.268	39.264	30.996	-15.004	46.000
791.942	-1.132	39.065	37.933	-8.067	46.000
981.725	1.386	31.369	32.754	-21.246	54.000
Vertical					
QP Detector					
66.551	-13.054	44.120	31.066	-8.934	40.000
270.391	-11.143	38.511	27.368	-18.632	46.000
325.217	-9.580	40.720	31.139	-14.861	46.000
380.043	-8.268	38.674	30.406	-15.594	46.000
746.957	-1.513	35.897	34.384	-11.616	46.000
973.290	1.273	30.323	31.595	-22.405	54.000

Note:

1. All Readings below 1GHz are Quasi-Peak, above are average value.
2. "■" means the worst emission level.
3. Measurement Level = Reading Level + Correct Factor

4. Band Edge

4.1. Test Setup



4.2. Limits

In any 9 kHz bandwidth outside the frequency band in which the spread spectrum intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 50 dB below that in the 9 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement. Attenuation below the general limits specified in Section 15.209(a) is not required. In addition, radiated emissions which fall in the restricted bands, as defined in Section 15.205(a), must also comply with the radiated emission limits specified in Section 15.209(a) (see Section 15.205(c)).

4.3. Test Procedure

The EUT and its simulators are placed on a turn table which is 0.8 meter above ground. The turn table can rotate 360 degrees to determine the position of the maximum emission level. The EUT was positioned such that the distance from antenna to the EUT was 3 meters.

The antenna can move up and down between 1 meter and 4 meters to find out the maximum emission level.

Both horizontal and vertical polarization of the antenna are set on measurement. In order to find the maximum emission, all of the interface cables must be manipulated according to ANSI C63.10: 2013 on radiated measurement.

The bandwidth below 30MHz setting on the field strength meter is 9kHz and above 30MHz is 120kHz.

4.4. Uncertainty

± 4.08 dB above 1GHz

± 4.22 dB below 1GHz

4.5. Test Result of Band Edge

Product : Key programming device
 Test Item : Band Edge Data
 Test Site : No.3 OATS
 Test date : 2016.8.9
 Test Mode : Mode 1: Transmit

RF Radiated Measurement

(Horizontal)

Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Emission Level (dBuV/m)	QP Limit (dBuV/m)	Result
13.110	20.020	4.400	24.420	69.540	Pass
13.360	20.020	5.900	25.920	69.540	Pass
13.410	20.020	5.700	25.720	69.540	Pass
14.010	20.020	4.300	24.320	69.540	Pass

Note:

1. All Readings below 1GHz are Quasi-Peak, above are average value.
2. “ ” means the worst emission level.
3. Measurement Level = Reading Level + Correct Factor

(Vertical)

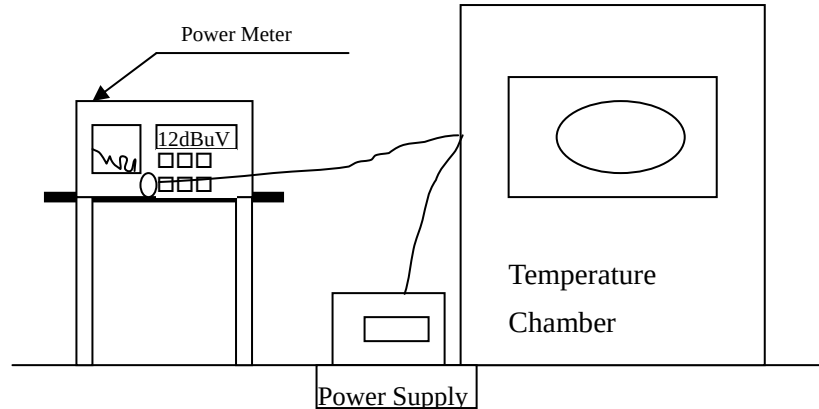
Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Emission Level (dBuV/m)	QP Limit (dBuV/m)	Result
13.110	20.020	4.600	24.620	69.540	Pass
13.360	20.020	6.700	26.720	69.540	Pass
13.410	20.020	7.300	27.320	69.540	Pass
14.010	20.020	4.700	24.720	69.540	Pass

Note:

1. All Readings below 1GHz are Quasi-Peak, above are average value.
2. “ ” means the worst emission level.
3. Measurement Level = Reading Level + Correct Factor

5. Frequency Tolerance

5.1. Test Setup



5.2. Limits

The frequency tolerance of the carrier signal shall be maintained within $\pm 0.01\%$ of the operating frequency.

5.3. Test Procedure

The over operating frequency over a temperature variation of -20 degrees to +50 degrees C at normal supply voltage, and for a variation in the primary supply voltage from 85% to 115% of the rated supply voltage at a temperature of 20 degrees C. For battery operated equipment, the equipment tests shall be performed using a new battery.

5.4. Uncertainty

± 283 Hz

5.5. Test Result of Frequency Stability

Product : Key programming device
 Test Item : Frequency Tolerance
 Test Site : Temperature Chamber
 Test date : 2016.8.9
 Test Mode : Mode 1: Transmit

Temperature (°C)	Voltage (V)	Observe Time	Declared Frequency (MHz)	Read Frequency (MHz)	Tolerance (%)	Limit (%)
20	3.6	start	13.56	13.55986	-0.001062	± 0.01 %
		2mins	13.56	13.55986	-0.001062	
		5mins	13.56	13.55986	-0.001062	
		10mins	13.56	13.55986	-0.001062	
20	4.14	start	13.56	13.55986	-0.001032	± 0.01 %
		2mins	13.56	13.55986	-0.001032	
		5mins	13.56	13.55986	-0.001032	
		10mins	13.56	13.55986	-0.001032	
20	3.06	start	13.56	13.55986	-0.001032	± 0.01 %
		2mins	13.56	13.55986	-0.001032	
		5mins	13.56	13.55986	-0.001032	
		10mins	13.56	13.55986	-0.001032	
50	3.6	start	13.56	13.55973	-0.001991	± 0.01 %
		2mins	13.56	13.55973	-0.001991	
		5mins	13.56	13.55973	-0.001991	
		10mins	13.56	13.55973	-0.001991	
40	3.6	start	13.56	13.55977	-0.001696	± 0.01 %
		2mins	13.56	13.55977	-0.001696	
		5mins	13.56	13.55977	-0.001696	
		10mins	13.56	13.55977	-0.001696	
30	3.6	start	13.56	13.55980	-0.001475	± 0.01 %
		2mins	13.56	13.55980	-0.001475	
		5mins	13.56	13.55980	-0.001475	
		10mins	13.56	13.55980	-0.001475	

10	3.6	start	13.56	13.55983	-0.001254	± 0.01 %
		2mins	13.56	13.55983	-0.001254	
		5mins	13.56	13.55983	-0.001254	
		10mins	13.56	13.55983	-0.001254	
0	3.6	start	13.56	13.55991	-0.000664	± 0.01 %
		2mins	13.56	13.55991	-0.000664	
		5mins	13.56	13.55991	-0.000664	
		10mins	13.56	13.55991	-0.000664	
-10	3.6	start	13.56	13.55996	-0.000295	± 0.01 %
		2mins	13.56	13.55996	-0.000295	
		5mins	13.56	13.55996	-0.000295	
		10mins	13.56	13.55996	-0.000295	
-20	3.6	start	13.56	13.55997	-0.000221	± 0.01 %
		2mins	13.56	13.55997	-0.000221	
		5mins	13.56	13.55997	-0.000221	
		10mins	13.56	13.55997	-0.000221	

6. EMI Reduction Method During Compliance Testing

No modification was made during testing.