

MRT Technology (Suzhou) Co., Ltd

Phone: +86-512-66308358 Fax: +86-512-66308368 www.mrt-cert.com Report No.: 1503RSU02203 Report Version: Issue Date: 05-12-2015

MEASUREMENT REPORT

FCC PART 15.231(e)

FCC ID: 2AEHLXCM-SLT

APPLICANT: EXIEM TECHNOLOGIES, LLC

Application Type: Certification

Product: SMARTLINK TPMS TABLET

Model No.: XCM-SLT

FCC Classification: FCC Part 15 Security/Remote Control Transmitter

(DSC)

FCC Rule Part(s): Part 15.231(e)

Test Procedure(s): ANSI C63.10-2009

Test Date: Apr. 26 ~ May 12, 2015

Reviewed By : Robin Wu)

Approved By : Marlinchen

(Marlin Chen)



The test results relate only to the samples tested.

This equipment has been shown to be capable of compliance with the applicable technical standards as indicated in the measurement report and was tested in accordance with the measurement procedures specified in ANSI C63.10-2009. Test results reported herein relate only to the item(s) tested.

The test report shall not be reproduced except in full without the written approval of MRT Technology (Suzhou) Co., Ltd.

FCC ID: 2AEHLXCM-SLT Page Number: 1 of 30





Revision History

Report No.	Version	Description	Issue Date
1503RSU02203	Rev. 01	Initial report	05-05-2015
1503RSU02203	Rev. 02	Added the Conducted Emission Test Data	05-12-2015



CONTENTS

De	scriptic	on	Page
1.	INTR	ODUCTION	6
	1.1.	Scope	6
	1.2.	MRT Test Location	6
2.	PRO	DUCT INFORMATION	7
	2.1.	Equipment Description	7
	2.2.	Test Standards	
	2.3.	Test Methodology	7
	2.4.	EUT Setup and Test Mode	7
3.	ANTE	ENNA REQUIREMENTS	8
4.	TES1	Γ EQUIPMENT CALIBRATION DATA	9
5.	MEA	SUREMENT UNCERTAINTY	10
6.	TES1	Γ RESULT	11
	6.1.	Summary	11
	6.2.	Radiated Emissions	12
	6.2.1.	Standard Applicable	12
	6.2.2.	Test Procedure	12
	6.2.3.	Test Setup	13
	6.2.4.	Test Results	14
	6.3.	20dB Bandwidth	20
	6.3.1.	Standard Applicable	20
	6.3.2.	Test Procedure	20
	6.3.3.	Test Setup	20
	6.3.4.	Test Result	21
	6.4.	Transmission Time	22
	6.4.1.	Standard Applicable	22
	6.4.2.	Test Procedure	22
	6.4.3.	Test Setup	22
	6.4.4.	Test Result	23
	6.5.	Duty Cycle	25
	6.5.1.	Standard Applicable	25
	6.5.2.	Test Procedure	25
	6.5.3.	Test Setup	25
	6.5.4.	Test Result	26



7. CONCLUSION......30



§2.1033 General Information

Applicant:	EXIEM TECHNOLOGIES, LLC		
Applicant Address:	2851 Massachusetts Avenue, Cincinnati, OH 45225, United States		
Manufacturer:	Suzhou Sate Auto Electronic Co., Ltd.		
Manufacturer Address:	No.36 Building, Yangtai Road, Suzou Industrial Park, Suzhou, Jiangsu,		
	P.R.China		
Test Site:	MRT Technology (Suzhou) Co., Ltd		
Test Site Address:	D8 Building, Youxin Industrial Park, No.2 Tian'edang Rd., Wuzhong		
	Economic Development Zone, Suzhou, China		
MRT Registration No.:	809388		
FCC Rule Part(s):	Part 15.231(e)		
Model No.	XCM-SLT		
FCC ID:	2AEHLXCM-SLT		
Test Device Serial No.:	N/A ☐ Production ☐ Pre-Production ☐ Engineering		
FCC Classification:	FCC Part 15 Security/Remote Control Transmitter(DSC)		

Test Facility / Accreditations

Measurements were performed at MRT Laboratory located in Tian'edang Rd., Suzhou, China.

- MRT facility is a FCC registered (MRT Reg. No. 809388) test facility with the site description report on file and has met all the requirements specified in Section 2.948 of the FCC Rules.
- MRT facility is an IC registered (MRT Reg. No. 11384A-1) test laboratory with the site description on file at Industry Canada.
- MRT facility is a VCCI registered (R-4179, G-814, C-4664, T-2206) test laboratory with the site description on file at VCCI Council.
- MRT Lab is accredited to ISO 17025 by the American Association for Laboratory Accreditation (A2LA) under the American Association for Laboratory Accreditation Program (A2LA Cert. No. 3628.01) in EMC, Telecommunications and Radio testing for FCC, Industry Canada, EU and TELEC Rules.



FCC ID: 2AEHLXCM-SLT Page Number: 5 of 30



1. INTRODUCTION

1.1. Scope

Measurement and determination of electromagnetic emissions (EMC) of radio frequency devices including intentional and/or unintentional radiators for compliance with the technical rules and regulations of the Federal Communications Commission and the Industry Canada Certification and Engineering Bureau.

1.2. MRT Test Location

The map below shows the location of the MRT LABORATORY, its proximity to the Taihu Lake. These measurement tests were conducted at the MRT Technology (Suzhou) Co., Ltd. Facility located at D8 Building, No.2 Tian'edang Rd., Wuzhong Economic Development Zone, Suzhou, China. The detailed description of the measurement facility was found to be in compliance with the requirements of § 2.948 according to ANSI C63.4-2009 on September 30, 2013.





2. PRODUCT INFORMATION

2.1. Equipment Description

Product Name	SMARTLINK TPMS TABLET	
Model No.	XCM-SLT	
Frequency Range	434.1 MHz	
Type of modulation	FSK	
Antenna Type	Integral Antenna	
Device Category	Fixed Device	

2.2. Test Standards

The following report is prepared on behalf of the **EXIEM TECHNOLOGIES**, **LLC** in accordance with FCC Part 15, Subpart C, and section 15.231, 15.203, 15.205 and 15.209 of the Federal Communication Commission rules.

The objective is to determine compliance with FCC Part 15, Subpart C, and section 15.231, 15.203, 15.205 and 15.209 of the Federal Communication Commission rules.

Maintenance of compliance is the responsibility of the manufacturer. Any modification of the product, which results in lowering the emission/immunity, should be checked to ensure compliance has been maintained.

2.3. Test Methodology

The measurement procedures described in the American National Standard for Testing Unlicensed Wireless Devices (ANSI C63.10-2009).

Deviation from measurement procedure......None

2.4. EUT Setup and Test Mode

The EUT was operated at continuous transmitting mode that was for the purpose of the measurements. All testing shall be performed under maximum output power condition, and to measure its highest possible emissions level, more detailed description as follows:

Test Mode List		
Test Mode	Description	Remark
Mode 1	Transmitting	With modulation

FCC ID: 2AEHLXCM-SLT Page Number: 7 of 30



3. ANTENNA REQUIREMENTS

Excerpt from §15.203 of the FCC Rules/Regulations:

"An intentional radiator antenna shall be designed to ensure that no antenna other than that furnished by the responsible party can be used with the device. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator shall be considered sufficient to comply with the provisions of this section."

- The antenna of the **SMARTLINK TPMS TABLET** is permanently attached.
- There are no provisions for connection to an external antenna.

Conclusion:

The SMARTLINK TPMS TABLET **FCC ID: 2AEHLXCM-SLT** unit complies with the requirement of §15.203.

FCC ID: 2AEHLXCM-SLT Page Number: 8 of 30

Report No.: 1503RSU02203



4. TEST EQUIPMENT CALIBRATION DATA

Radiated Emissions

Instrument	Manufacturer	Type No.	Asset No.	Cali. Interval	Cali. Due Date
Spectrum Analyzer	Agilent	E4447A	MRTSUE06028	1 year	2015/10/09
EMI Test Receiver	R&S	ESR7	MRTSUE06001	1 year	2015/11/07
Preamplifier	Agilent	83017A	MRTSUE06020	1 year	2015/12/13
Preamplifier	MRT	AP01G18	MRTSUE06019	1 year	2015/12/13
Loop Antenna	Schwarzbeck	FMZB1519	MRTSUE06025	1 year	2015/11/08
TRILOG Antenna	Schwarzbeck	VULB9162	MRTSUE06022	1 year	2015/11/08
Broad-Band Horn Antenna	Schwarzbeck	BBHA9120D	MRTSUE06023	1 year	2015/11/08
Temperature/Humidity Meter	Anymetre	TH101B	MRTSUE06046	1 year	2015/11/14

20dB Bandwidth

Instrument	Manufacturer	Type No.	Asset No.	Cali. Interval	Cal. Due. Date
Spectrum Analyzer	Agilent	N9020A	MRTSUE06106	1 year	2016/04/23
TRILOG Antenna	Schwarzbeck	VULB9162	MRTSUE06022	1 year	2015/11/08
Temperature/Humidity Meter	Anymetre	TH101B	MRTSUE06046	1 year	2015/11/15

Transmission Time

Instrument	Manufacturer	Type No.	Asset No.	Cali. Interval	Cal. Due. Date
Spectrum Analyzer	Agilent	N9020A	MRTSUE06106	1 year	2016/04/23
TRILOG Antenna	Schwarzbeck	VULB9162	MRTSUE06022	1 year	2015/11/08
Temperature/Humidity Meter	Anymetre	TH101B	MRTSUE06046	1 year	2015/11/15

Duty Cycle

Instrument	Manufacturer	Type No.	Asset No.	Cali. Interval	Cal. Due. Date
Spectrum Analyzer	Agilent	N9020A	MRTSUE06106	1 year	2016/04/23
TRILOG Antenna	Schwarzbeck	VULB9162	MRTSUE06022	1 year	2015/11/08
Temperature/Humidity Meter	Anymetre	TH101B	MRTSUE06046	1 year	2015/11/15

FCC ID: 2AEHLXCM-SLT Page Number: 9 of 30



5. MEASUREMENT UNCERTAINTY

Where relevant, the following test uncertainty levels have been estimated for tests performed on the EUT as specified in CISPR 16-4-2. This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Radiated Emission Measurement

Measuring Uncertainty for a Level of Confidence of 95% (U=2Uc(y)):

9kHz ~ 1GHz: 4.18dB 1GHz ~ 18GHz: 4.76dB

FCC ID: 2AEHLXCM-SLT Page Number: 10 of 30



6. TEST RESULT

6.1. Summary

Company Name: <u>EXIEM TECHNOLOGIES, LLC</u>

FCC ID: <u>2AEHLXCM-SLT</u>

FCC Part Section(s)	Test Description	Test Condition	Test Result
15.205	Radiated Spurious		Door
15.231(e)	Emissions		Pass
15.231(c)	20dB Bandwidth	Radiated	Pass
15.231(e)	Transmission Time		Pass
15.231(e)	Duty Cycle		Pass

Notes:

- 1) For radiated emission test, every axis (X, Y, Z) was also verified. The test results shown in the following sections represent the worst case emissions.
- 2) The analyzer plots shown in this section were all taken with a correction table loaded into the analyzer. The correction table was used to account for the losses of the cables and attenuators used as part of the system to connect the EUT to the analyzer at all frequencies of interest.
- 3) All antenna port conducted emissions testing was performed on a test bench with the antenna port of the EUT connected to the spectrum analyzer through calibrated cables and attenuators.

FCC ID: 2AEHLXCM-SLT Page Number: 11 of 30



6.2. Radiated Emissions

6.2.1. Standard Applicable

According to §15.231(e), the field strength of emissions from intentional radiators operated under this section shall not exceed the following:

Fundamental frequency (MHz)	Field strength of fundamental (microvolts/meter)	Field strength of spurious emission (microvolts/meter)
40.66-40.70	1,000	100
70-130	500	50
130-174	500 to 1,500 ¹	50 to 150 ¹
174-260	1,500	150
260-470	1,500 to 5,000 ¹	150 to 500 ¹
Above 470	5,000	500

The limits on the field strength of the spurious emissions in the above table are based on the fundamental frequency of the intentional radiator. Spurious emissions shall be attenuated to the average (or, alternatively, CISPR quasi-peak) limits shown in this table or to the general limits shown in §15.209, whichever limit permits a higher field strength.

The emission limit in this paragraph is based on measurement instrumentation employing an average detector. The provisions in §15.35 for limiting peak emissions apply. Spurious Radiated Emissions measurements start below or at the lowest crystal frequency.

Compliance with the provisions of §15.205 shall be demonstrated using the measurement instrumentation specified in that section.

6.2.2. Test Procedure

The setup of EUT is according with per ANSI C63.10-2009 measurement procedure. The specification used was with the FCC Part 15.231(e) and FCC Part 15.209 Limit.

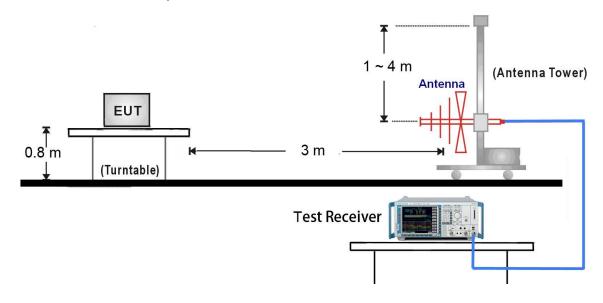
FCC ID: 2AEHLXCM-SLT Page Number: 12 of 30



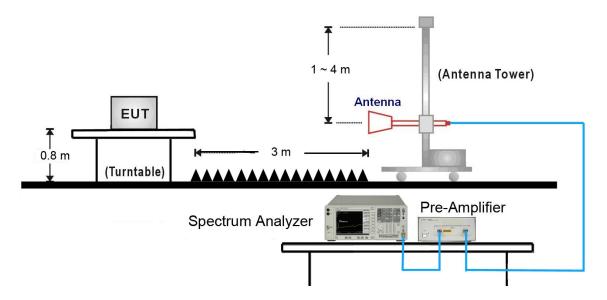
6.2.3. Test Setup

The setup of EUT is according with per ANSI C63.10-2009 measurement procedure. The specification used was with the FCC Part 15.231(e) and FCC Part 15.209 Limit.

30MHz ~ 1GHz Test Setup:



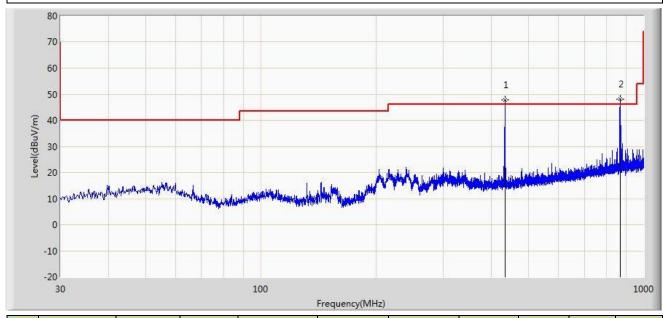
1GHz ~ 25GHz Test Setup:





6.2.4. Test Results

Site: AC1	Time: 2015/05/04 - 12:15
Limit: FCC_Part15.209_RE(3m)	Engineer: Roy Cheng
Probe: VULB9162_0.03-8GHz	Polarity: Horizontal
EUT: SMARTLINK TPMS TABLET	Power: AC 120V/60Hz
Note: Transmit	•



No	Frequency	Reading	Factor	Duty Cycle	Measure	Limit	Over	Ant	Table	Type
	(MHz)	Level	(dB)	Factor	Level	(dBuV/m)	Limit	Pos	Pos	
		(dBuV)		(dB)	(dBuV/m)		(dB)	(cm)	(deg)	
1	434.126	30.638	17.104	N/A	47.742	92.872	-45.130	100	123	PK
	434.126	30.638	17.104	-9.88	37.862	72.872	-35.010	100	123	AV
2	867.474	24.343	23.693	N/A	48.036	72.872	-24.836	100	325	PK
	867.474	24.343	23.693	-9.88	38.156	52.872	-14.716	100	325	AV

Note 1: Testing is carried out with frequency rang 9 kHz to the tenth harmonics. There is the ambient noise within frequency range 9 kHz \sim 30 MHz, the permissible value is not show in the report.

Note 2: The fundamental frequency is 434.1MHz, so the fundamental and spurious emissions radiated limit base on the operating frequency 434.1MHz.

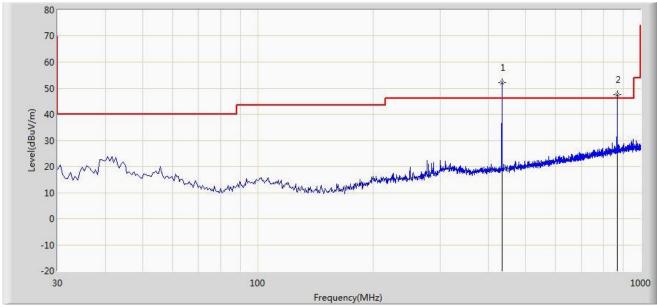
Note 3: Peak Measure Level ($dB\mu V/m$) = Reading Level ($dB\mu V$) + Factor (dB).

AV Measure Level = Peak Measure Level – Duty Cycle Factor.

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m).



Site: AC1	Time: 2015/05/04 - 12:17
Limit: FCC_Part15.209_RE(3m)	Engineer: Roy Cheng
Probe: VULB9162_0.03-8GHz	Polarity: Vertical
EUT: SMARTLINK TPMS TABLET	Power: AC 120V/60Hz
Note: Transmit	



No	Frequency	Reading	Factor	Duty Cycle	Measure	Limit	Over	Ant	Table	Туре
	(MHz)	Level	(dB)	Factor	Level	(dBuV/m)	Limit	Pos	Pos	
		(dBuV)		(dB)	(dBuV/m)		(dB)	(cm)	(deg)	
1	434.005	34.995	17.103	N/A	52.098	92.872	-40.774	100	210	PK
	434.005	34.995	17.103	-9.88	42.218	72.872	-30.654	100	210	AV
2	868.565	23.970	23.703	N/A	47.673	72.872	-25.199	100	98	PK
	868.565	23.970	23.703	-9.88	37.793	52.872	-15.079	100	98	AV

Note 1: Testing is carried out with frequency rang 9 kHz to the tenth harmonics. There is the ambient noise within frequency range 9 kHz \sim 30 MHz, the permissible value is not show in the report.

Note 2: The fundamental frequency is 434.1MHz, so the fundamental and spurious emissions radiated limit base on the operating frequency 434.1MHz.

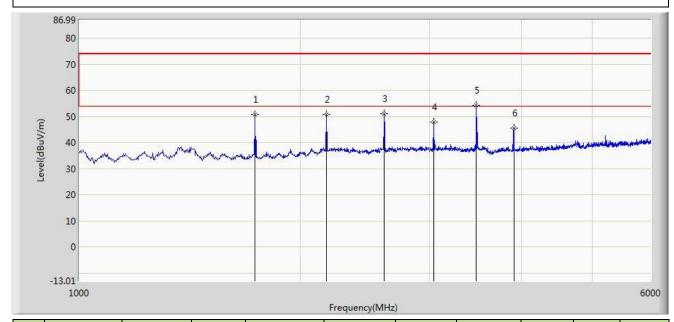
Note 3: Peak Measure Level ($dB\mu V/m$) = Reading Level ($dB\mu V$) + Factor (dB).

AV Measure Level = Peak Measure Level – Duty Cycle Factor.

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m).



Site: AC1	Time: 2015/04/20 - 17:20
Limit: FCC_Part15.209_RE(3m)	Engineer: Roy Cheng
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: SMARTLINK TPMS TABLET	Power: AC 120V/60Hz
Note: Transmit	•



No	Frequency	Reading	Factor	Duty cycle	Measure	Limit	Over	Ant	Table	Туре
	(MHz)	Level	(dB)	Factor	Level	(dBuV/	Limit	Pos	Pos	
		(dBuV)		(dB)	(dBuV/m)	m)	(dB)	(cm)	(deg)	
1	1737.500	58.189	-7.308	N/A	50.882	74	-23.118	100	125	PK
	1737.500	58.189	-7.308	-9.88	41.002	54	-12.998	100	125	AV
2	2170.000	54.566	-3.940	N/A	50.626	74	-23.374	100	14	PK
	2170.000	54.566	-3.940	-9.88	40.746	54	-13.254	100	14	AV
3	2605.000	54.355	-3.277	N/A	51.077	74	-22.923	100	101	PK
	2605.000	54.355	-3.277	-9.88	41.197	54	-12.803	100	101	AV
4	3040.000	49.806	-2.031	N/A	47.775	74	-26.225	100	24	PK
	3040.000	49.806	-2.031	-9.88	37.895	54	-16.105	100	24	AV
5	3472.500	55.512	-1.284	N/A	54.228	74	-19.772	100	302	PK
	3472.500	55.512	-1.284	-9.88	44.348	54	-9.652	100	302	AV
6	3907.500	45.463	0.215	N/A	45.678	74	-28.322	100	152	PK
	3907.500	45.463	0.215	-9.88	35.798	54	-18.202	100	152	AV

Note 1: Testing is carried out with frequency rang 9 kHz to the tenth harmonics. There is the ambient noise within frequency range 9 kHz \sim 30 MHz, the permissible value is not show in the report.

Note 2: The fundamental frequency is 434.1MHz, so the fundamental and spurious emissions radiated limit base on the operating frequency 434.1MHz.





Note 3: Peak Measure Level ($dB\mu V/m$) = Reading Level ($dB\mu V$) + Factor (dB).

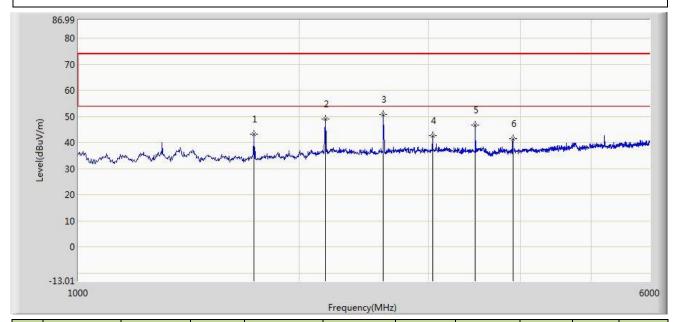
AV Measure Level = Peak Measure Level - Duty Cycle Factor.

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) – Pre_Amplifier Gain (dB).

FCC ID: 2AEHLXCM-SLT Page Number: 17 of 30



Site: AC1	Time: 2015/04/20 - 17:28
Limit: FCC_Part15.209_RE(3m)	Engineer: Roy Cheng
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT: SMARTLINK TPMS TABLET	Power: AC 120V/60Hz
Note: Transmit	



N	Frequency	Reading	Factor	Duty cycle	Measure	Limit	Over	Ant	Table	Туре
О	(MHz)	Level	(dB)	Factor	Level	(dBuV/	Limit	Pos	Pos	
		(dBuV)		(dB)	(dBuV/m)	m)	(dB)	(cm)	(deg)	
1	1737.500	50.625	-7.308	N/A	43.318	74	-30.682	100	125	PK
	1737.500	50.625	-7.308	-9.88	33.438	54	-20.562	100	125	AV
2	2170.000	52.876	-3.940	N/A	48.936	74	-25.064	100	14	PK
	2170.000	52.876	-3.940	-9.88	39.056	54	-14.944	100	14	AV
3	2605.000	54.046	-3.277	N/A	50.768	74	-23.232	100	101	PK
	2605.000	54.046	-3.277	-9.88	40.888	54	-13.112	100	101	AV
4	3040.000	44.529	-2.031	N/A	42.498	74	-31.502	100	24	PK
	3040.000	44.529	-2.031	-9.88	32.618	54	-21.382	100	24	AV
5	3472.500	48.024	-1.284	N/A	46.740	74	-27.260	100	302	PK
	3472.500	48.024	-1.284	-9.88	36.860	54	-17.140	100	302	AV
6	3907.500	41.312	0.215	N/A	41.527	74	-32.473	100	152	PK
	3907.500	41.312	0.215	-9.88	31.647	54	-22.353	100	152	AV

Note 1: Testing is carried out with frequency rang 9 kHz to the tenth harmonics. There is the ambient noise within frequency range 9 kHz \sim 30 MHz, the permissible value is not show in the report.

Note 2: The fundamental frequency is 434.1MHz, so the fundamental and spurious emissions radiated limit base on the operating frequency 434.1MHz.





Note 3: Peak Measure Level ($dB\mu V/m$) = Reading Level ($dB\mu V$) + Factor (dB).

AV Measure Level = Peak Measure Level - Duty Cycle Factor.

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) – Pre_Amplifier Gain (dB).

FCC ID: 2AEHLXCM-SLT Page Number: 19 of 30



6.3. 20dB Bandwidth

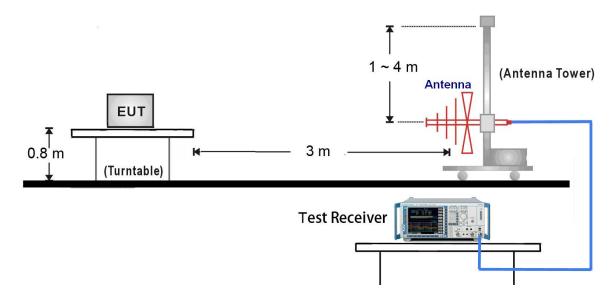
6.3.1. Standard Applicable

According to FCC Part 15.231(c), the bandwidth of the emission shall be no wider than 0.25% of the center frequency for devices operating above 70MHz and below 900MHz. Bandwidth is determined at the points 20 dB down from the modulated carrier.

6.3.2. Test Procedure

With the EUT's antenna attached, the EUT's 20dB Bandwidth power was received by the test antenna, which was connected to the spectrum analyzer with the START, and STOP frequencies set to the EUT's operation band.

6.3.3. Test Setup





6.3.4. Test Result

Test Frequency (MHz)	20dB Bandwidth (kHz)	Limit (kHz)	Result
434.1	380.5	≤ 1085.25	Pass

Limit = Fundamental Frequency * 0.25% = 434.1 MHz * 0.25% = 1085.25 kHz

20dB Bandwidth Test Plot





6.4. Transmission Time

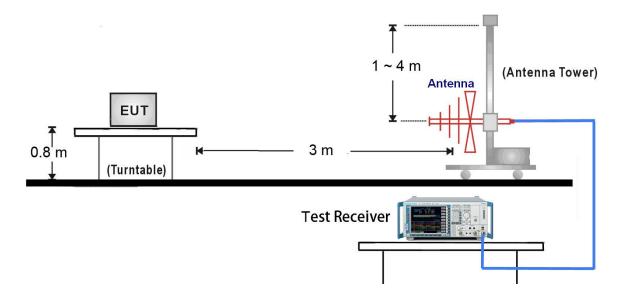
6.4.1. Standard Applicable

According to FCC 15.231(e), devices operated under the provisions of this paragraph shall be provided with a means for automatically limiting operation so that the duration of each transmission shall not be greater than one second and the silent period between transmissions shall be at least 30 times the duration of the transmission but in no case less than 10 seconds.

6.4.2. Test Procedure

With the EUT's antenna attached, the EUT's output signal was received by the test antenna, which was connected to the spectrum analyzer. Set the center frequency to 434.1MHz, than set the spectrum analyzer to Zero Span for the release time reading. During the testing, the switch was released then the EUT automatically deactivated.

6.4.3. Test Setup



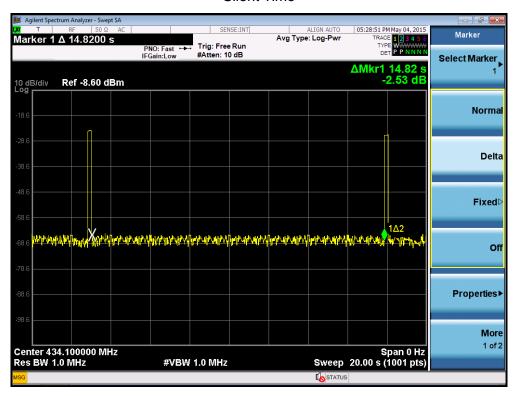
FCC ID: 2AEHLXCM-SLT Page Number: 22 of 30



6.4.4. Test Result

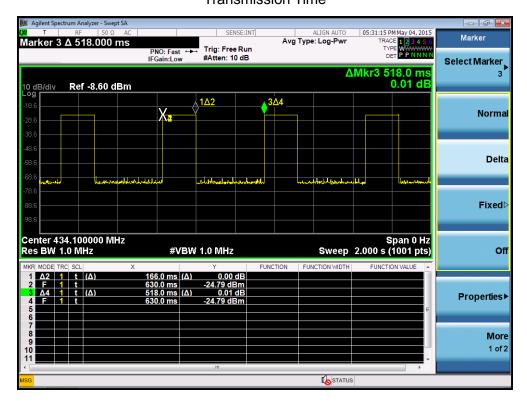
Item	Measured Value	Limit	Result
Transmission Time(Ton)	0.17 s	≤1s	Pass
Silent Time	14.82 s	≥ 10 s	Pass
Silent Time/Transmission Time	87.18	≥ 30 times	Pass

Silent Time





Transmission Time





6.5. Duty Cycle

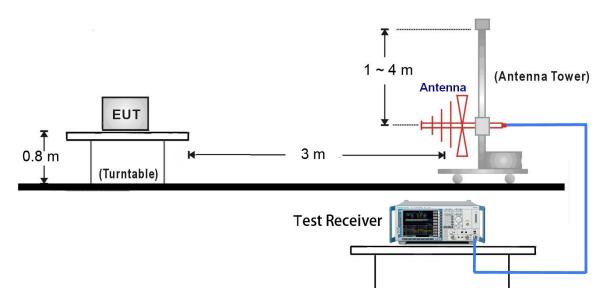
6.5.1. Standard Applicable

According to FCC Part 15.231(e) and 15.35(c), for pulse operation transmitter, the averaging pulsed emissions are calculated by peak value of measured emission plus duty cycle factor.

6.5.2. Test Procedure

With the EUT's antenna attached, the EUT's output signal was received by the test antenna, which was connected to the spectrum analyzer. Set the center frequency to 434.1MHz, than set the spectrum analyzer to Zero Span for the release time reading. During the testing, the switch was released then the EUT automatically deactivated.

6.5.3. Test Setup



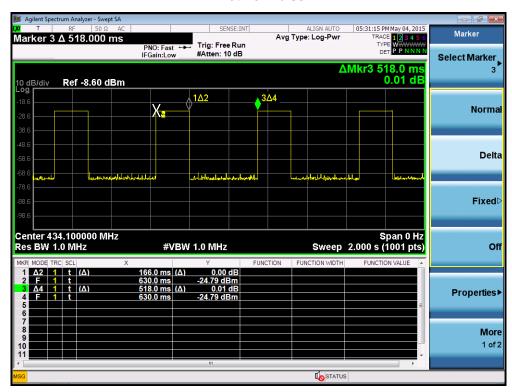


6.5.4. Test Result

Total Time (Ton)	The duration of one	Duty Cycle	Duty Cycle Factor
(ms)	cycle	(%)	(dB)
	(ms)		
166.0	518.0	32.05	-9.88

Note: Duty Cycle Factor = -20*Log(1/Duty Cycle).

Width of Pulse





6.6. AC Conducted Emissions Measurement

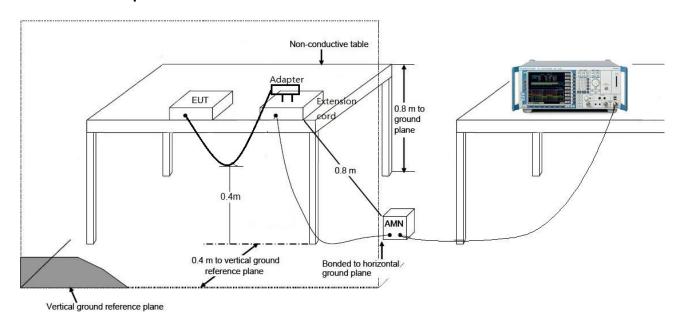
6.6.1. Test Limit

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

Note 1: The lower limit shall apply at the transition frequencies.

Note 2: The limit decreases linearly with the logarithm of the frequency in the range 0.15MHz to 0.5MHz.

6.6.2. Test Setup



FCC ID: 2AEHLXCM-SLT Page Number: 27 of 30



6.6.3. Test Result

Site: SR2	Time: 2015/05/12 - 17:42
Limit: FCC_Part15.207_CE_AC Power	Engineer: Roy Cheng
Probe: ENV216_101683_Filter On	Polarity: Line
EUT: SMARTLINK TPMS TABLET	Power: AC 120V/60Hz
Note: Normal Operation	

80 70 60 50 40 Level(dBuV) 30 20 10 0 -10 -20 0.15 10 30 Frequency(MHz)

No	Flag	Mark	Frequency	Measure	Reading	Over Limit	Limit	Factor	Туре
			(MHz)	Level	Level	(dB)	(dBuV)	(dB)	
				(dBuV)	(dBuV)				
1			0.158	42.663	32.352	-22.905	65.568	10.311	QP
2			0.158	30.948	20.637	-24.621	55.568	10.311	AV
3			0.190	37.041	27.012	-26.996	64.037	10.029	QP
4			0.190	24.594	14.565	-29.443	54.037	10.029	AV
5			0.230	35.310	25.362	-27.140	62.450	9.947	QP
6			0.230	24.553	14.606	-27.897	52.450	9.947	AV
7			0.270	35.962	25.982	-25.156	61.118	9.980	QP
8			0.270	28.102	18.122	-23.016	51.118	9.980	AV
9			0.390	28.755	18.678	-29.308	58.064	10.077	QP
10			0.390	18.066	7.989	-29.998	48.064	10.077	AV
11			0.542	34.090	23.945	-21.910	56.000	10.145	QP
12		*	0.542	26.169	16.024	-19.831	46.000	10.145	AV

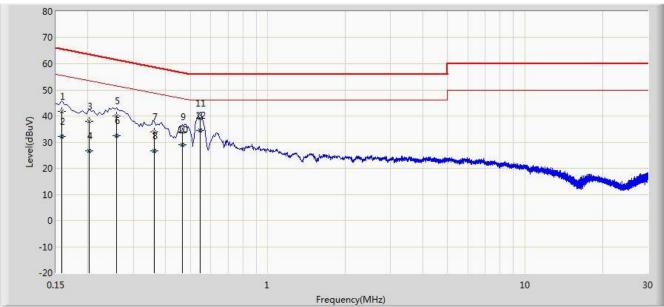
Note: Measure Level (dB μ V) = Reading Level (dB μ V) + Factor (dB)

Factor (dB) = Cable Loss (dB) + LISN Factor (dB)



Site: SR2	Time: 2015/05/12 - 17:48
Limit: FCC_Part15.207_CE_AC Power	Engineer: Roy Cheng
Probe: ENV216_101683_Filter On	Polarity: Neutral
EUT: SMARTLINK TPMS TABLET	Power: AC 120V/60Hz
Note: Normal Operation	•

Note: Normal Operation



No	Flag	Mark	Frequency	Measure	Reading	Over Limit	Limit	Factor	Туре
			(MHz)	Level	Level	(dB)	(dBuV)	(dB)	
				(dBuV)	(dBuV)				
1			0.158	41.788	31.498	-23.780	65.568	10.290	QP
2			0.158	32.289	21.999	-23.280	55.568	10.290	AV
3			0.202	37.914	27.906	-25.614	63.528	10.008	QP
4			0.202	26.712	16.704	-26.816	53.528	10.008	AV
5			0.258	39.911	29.904	-21.584	61.496	10.007	QP
6			0.258	32.503	22.496	-18.993	51.496	10.007	AV
7			0.362	33.889	23.805	-24.794	58.682	10.084	QP
8			0.362	26.588	16.504	-22.095	48.682	10.084	AV
9			0.466	33.877	23.716	-22.708	56.585	10.162	QP
10			0.466	28.848	18.686	-17.737	46.585	10.162	AV
11			0.546	39.062	28.901	-16.938	56.000	10.161	QP
12		*	0.546	34.457	24.296	-11.543	46.000	10.161	AV

Note: Measure Level (dB μ V) = Reading Level (dB μ V) + Factor (dB)

Factor (dB) = Cable Loss (dB) + LISN Factor (dB)



7. CONCLUSION

The data collected relate only the item(s) tested and show that the **SMARTLINK TPMS TABLET FCC ID: 2AEHLXCM-SLT** is in compliance with FCC Part 15.231(e) of the FCC Rules.

————— The End —————