

APPLICATION CERTIFICATION FCC Part 15C
On Behalf of
Alleswolke Inc.

Alleswolke LTE Dashcam

Model No.: UCM 3310, UCM 3320, UCM3300, UCM 4300

FCC ID: 2AOYPUCM3310R

Prepared for : Alleswolke Inc.
Address : 39899 Balentine Drive Suite 200, Newark, CA, USA
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Report Number : ATE20180514
Date of Test : Apr. 07, 2018-- Apr. 10, 2018
Date of Report : Apr. 11, 2018

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Test Report Certification

Applicant : Alleswolke Inc.
Address : 39899 Balentine Drive Suite 200, Newark, CA, USA 94536
Manufacturer : Nanjing Miaow Planet Technology Co., Ltd.
Address : Building 4 SEU Science Park Changjianghou St Xuanwu Nanjing, China
Product : Alleswolke LTE Dashcam
UCM 3310, UCM 3320, UCM3300, UCM 4300
Model No. : (Note: These samples are same except for the model number and colors are different.
So we prepare the UCM 3310 for test.)
Trade name : n.a

Measurement Procedure Used:


FCC Rules and Regulations Part 15 Subpart C Section 15.249 ANSI C63.10: 2013


The EUT was tested according to FCC 47CFR 15.249 for compliance to FCC 47CFR 15.249 requirements

The device described above is tested by Shenzhen ACCURATE TECHNOLOGY CO. LTD to determine the maximum emission levels emanating from the device. The maximum emission levels are compared to the FCC Part 15 Subpart C Section 15.249 limits. The measurement results are contained in this test report and Shenzhen ACCURATE TECHNOLOGY CO. LTD is assumed full responsibility for the accuracy and completeness of these measurements. Also, this report shows that the Equipment Under Test (EUT) is to be technically compliant with the FCC requirements.

This report applies to above tested sample only. This report shall not be reproduced in part without written approval of Shenzhen ACCURATE TECHNOLOGY CO. LTD.

Date of Test : Apr. 07, 2018-- Apr. 10, 2018
Date of Report : Apr. 11, 2018

Prepared by : 
(Timothy G. Engler)

Approved & Authorized Signer : 
(Sean Liu, Manager)

1. GENERAL INFORMATION

1.1. Description of Device (EUT)

EUT	:	Alleswolke LTE Dashcam
Model No.	:	UCM 3310, UCM 3320, UCM3300, UCM 4300
Power Supply	:	DC 3V(Powered by battery)
Operate Frequency	:	2402-2459MHz
Number of channel	:	3
Modulation mode	:	GFSK
Antenna Gain	:	0dBi
Antenna type	:	PCB Antenna
Applicant	:	Alleswolke Inc.
Address	:	39899 Balentine Drive Suite 200, Newark, CA, USA 94536
Manufacturer	:	Nanjing Miaow Planet Technology Co., Ltd.
Address	:	Building 4 SEU Science Park Changjianghou St Xuanwu Nanjing, China
Date of sample received	:	Mar. 08, 2018
Date of Test	:	Apr. 07, 2018-- Apr. 10, 2018

1.2. Special Accessory and Auxiliary Equipment

N/A

1.3. Model difference declaration

UCM 3310, UCM 3320, UCM 3300, UCM 4300 were identical inside, the electrical circuit design, layout, components used and internal wiring, with only difference being model name for different customers.

1.4. Description of Test Facility

EMC Lab	: Recognition of accreditation by Federal Communications Commission (FCC) The Designation Number is CN1189 The Registration Number is 708358 Listed by Innovation, Science and Economic Development Canada (ISED) The Registration Number is 5077A-2 Accredited by China National Accreditation Service for Conformity Assessment (CNAS) The Registration Number is CNAS L3193 Accredited by American Association for Laboratory Accreditation (A2LA) The Certificate Number is 4297.01
Name of Firm	: Shenzhen Accurate Technology Co., Ltd.
Site Location	: 1/F., Building A, Changyuan New Material Port, Science & Industry Park, Nanshan District, Shenzhen, Guangdong, P.R. China

1.5. Measurement Uncertainty

Conducted Emission Expanded Uncertainty	=	2.23dB, k=2
Radiated emission expanded uncertainty (9kHz-30MHz)	=	3.08dB, k=2
Radiated emission expanded uncertainty (30MHz-1000MHz)	=	4.42dB, k=2
Radiated emission expanded uncertainty (Above 1GHz)	=	4.06dB, k=2

2. MEASURING DEVICE AND TEST EQUIPMENT

Table 1: List of Test and Measurement Equipment

Kind of equipment	Manufacturer	Type	S/N	Calibrated dates	Cal. Interval
EMI Test Receiver	Rohde&Schwarz	ESCS30	100307	Jan. 06, 2018	One Year
EMI Test Receiver	Rohde&Schwarz	ESPI3	101526/003	Jan. 06, 2018	One Year
Spectrum Analyzer	Agilent	E7405A	MY45115511	Jan. 06, 2018	One Year
Pre-Amplifier	Rohde&Schwarz	CBLU118354 0-01	3791	Jan. 06, 2018	One Year
Loop Antenna	Schwarzbeck	FMZB1516	1516131	Jan. 06, 2018	One Year
Bilog Antenna	Schwarzbeck	VULB9163	9163-323	Jan. 06, 2018	One Year
Horn Antenna	Schwarzbeck	BBHA9120D	9120D-655	Jan. 06, 2018	One Year
Horn Antenna	Schwarzbeck	BBHA9120D	9120D-1067	Jan. 06, 2018	One Year
LISN	Rohde&Schwarz	ESH3-Z5	100305	Jan. 06, 2018	One Year
LISN	Schwarzbeck	NSLK8126	8126431	Jan. 06, 2018	One Year
Highpass Filter	Wainwright Instruments	WHKX3.6/18 G-10SS	N/A	Jan. 06, 2018	One Year
Band Reject Filter	Wainwright Instruments	WRCG2400/2 485-2375/2510 -60/11SS	N/A	Jan. 06, 2018	One Year

3. OPERATION OF EUT DURING TESTING

3.1.Operating Mode

The mode is used: **Transmitting mode**

Low Channel: 2402MHz

Middle Channel: 2432MHz

High Channel: 2459MHz

3.2.Configuration and peripherals

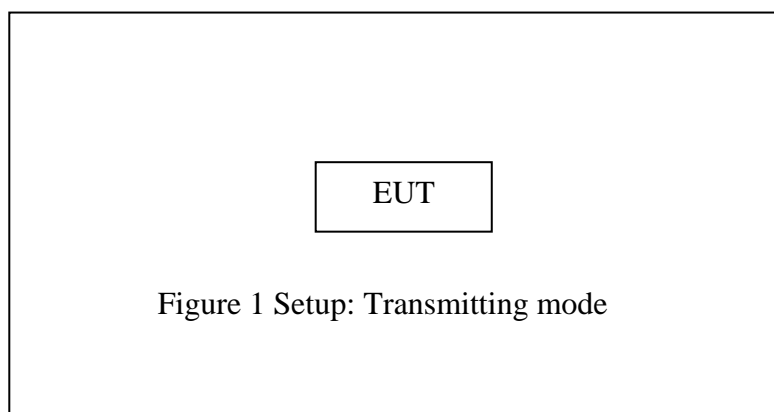


Figure 1 Setup: Transmitting mode

3.3.Carrier Frequency of Channels

Frequency Channel

Channel number	Frequency(MHz)
1	2402
2	2432
3	2459

4. TEST PROCEDURES AND RESULTS

FCC Rules	Description of Test	Result
Section 15.215(c)	20dB Bandwidth	Compliant
Section 15.249(d)	Band Edge Compliance Test	Compliant
Section 15.205(a), Section 15.209(a), Section 15.249, Section 15.35	Radiated Spurious Emission Test	Compliant
Section 15.207	AC Power Line Conducted Emission Test	N/A
Section 15.203	Antenna Requirement	Compliant

Note: The power supply mode of the EUT is DC 3V, According to the FCC standard requirements, conducted emission is not applicable.

5. 20DB BANDWIDTH MEASUREMENT

5.1. Block Diagram of Test Setup



5.2. The Requirement For Section 15.215(c)

The bandwidth of a frequency hopping channel is the 20 dB emission bandwidth, measured with the hopping stopped. The system RF bandwidth is equal to the channel bandwidth multiplied by the number of channels in the hopset. The hopset shall be such that the near-term distribution of frequencies appears random, with sequential hops randomly distributed in both direction and magnitude of change in the hopset while the long-term distribution appears evenly distributed.

5.3. Operating Condition of EUT

5.3.1. Setup the EUT and simulator as shown as Section 5.1.

5.3.2. Turn on the power of all equipment.

5.3.3. Let the EUT work in TX modes measure it. The transmit frequency are 2402, 2432, 2459MHz.

5.4. Test Procedure

5.4.1. Place the EUT on the table and set it in transmitting mode.

5.4.2. Remove the antenna from the EUT and then connect a low loss RF cable from the antenna port to the spectrum analyzer.

5.4.3. Set RBW of spectrum analyzer to 100 kHz and VBW to 300 kHz, Detector function=peak, Trace=max hold, Sweep=auto.

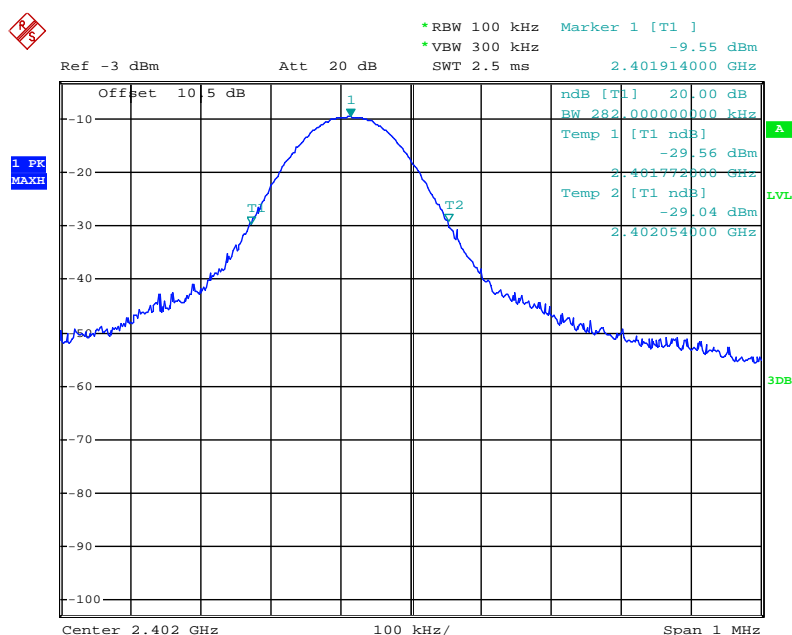
5.4.4. Set the measured low, middle and high frequency and test 20dB bandwidth with spectrum analyzer.

5.5. Test Result

Channel	Frequency(MHz)	20 dB Bandwidth(MHz)
Low	2402	0.282
Middle	2432	0.278
High	2459	0.280

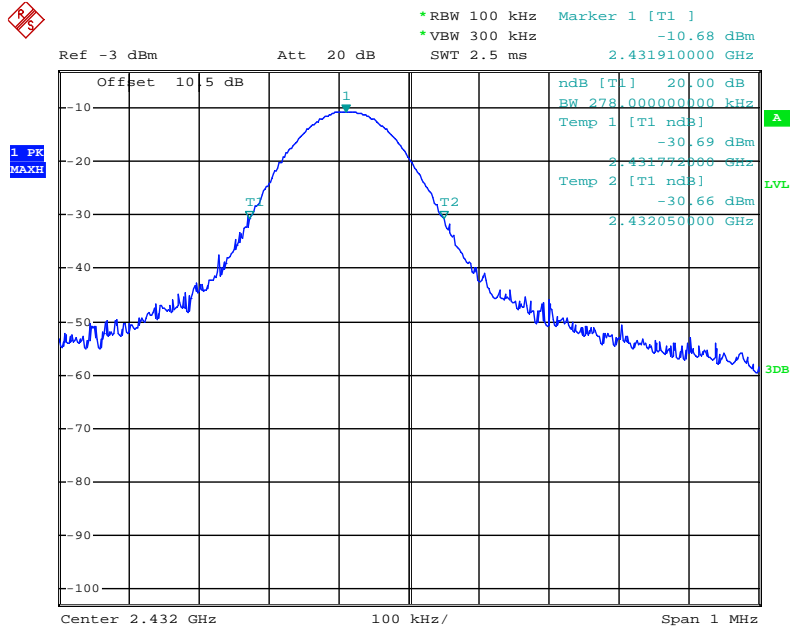
The spectrum analyzer plots are attached as below.

Low channel



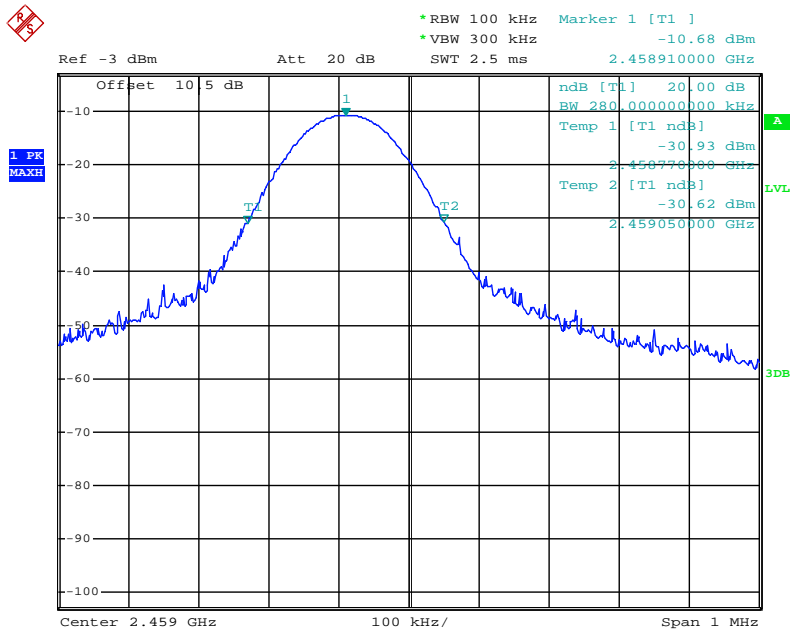
Date: 8.APR.2018 09:37:59

Middle channel



Date: 8.APR.2018 09:38:51

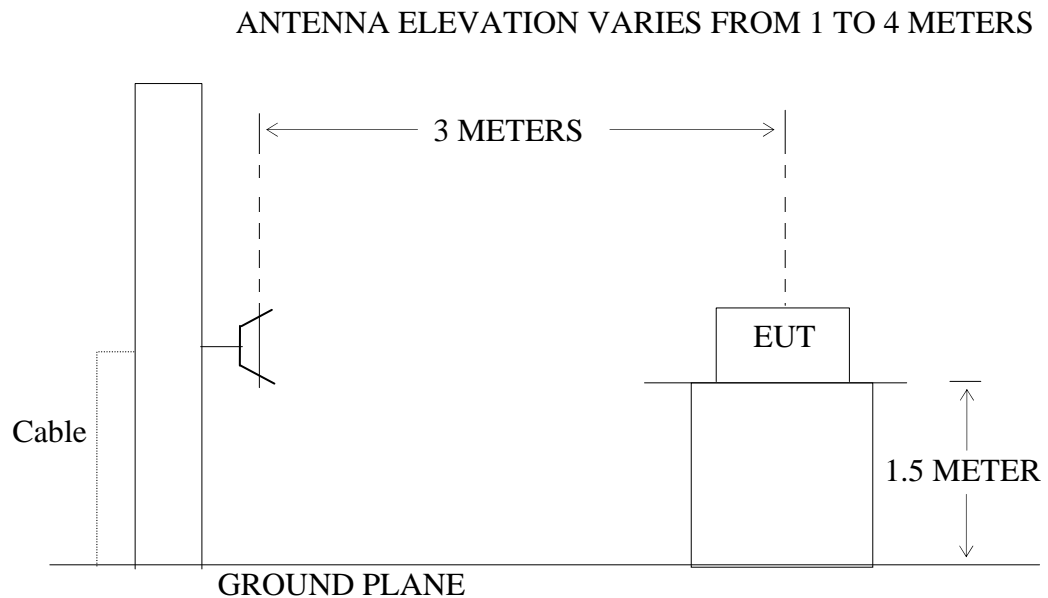
High channel



Date: 8.APR.2018 09:39:32

6. BAND EDGE COMPLIANCE TEST

6.1. Block Diagram of Test Setup



6.2. The Requirement For Section 15.249

In any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement, provided the transmitter demonstrates compliance with the peak conducted power limits. If the transmitter complies with the conducted power limits based on the use of RMS averaging over a time interval, as permitted under paragraph A8.4(4), the attenuation required shall be 30 dB instead of 20 dB. 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).

6.3. EUT Configuration on Measurement

The equipment are installed on the emission Measurement to meet the commission requirements and operating regulations in a manner which tends to maximize its emission characteristics in normal application.

6.4. Operating Condition of EUT

6.4.1. Setup the EUT and simulator as shown as Section 6.1.

6.4.2. Turn on the power of all equipment.

6.4.3. Let the EUT work in TX modes measure it. The transmit frequency are 2402, 2459MHz.

6.5. Test Procedure

Radiate Band Edge:

6.5.1. The EUT is placed on a turntable, which is 1.5m above the ground plane and worked at highest radiated power.

6.5.2. The turntable was rotated for 360 degrees to determine the position of maximum emission level.

6.5.3. EUT is set 3m away from the receiving antenna, which is varied from 1m to 4m to find out the highest emission.

6.5.4. Set the spectrum analyzer in the following setting in order to capture the lower and upper band-edges of the emission:

RBW=1MHz, VBW=1MHz

6.5.5. The band edges was measured and recorded.

6.6. Test Result

Job No.: jp #1077

Standard: FCC 15.249

Test item: Radiation Test

Temp.(C)/Hum.(%) 25 C / 55 %

EUT: Alleswolke LTE Dashcam

Mode: TX 2402MHz

Model: UCM 3310

Manufacturer: Nanjing Miaow Planet Technology Co., Ltd

Polarization: Horizontal

Power Source: DC 3V

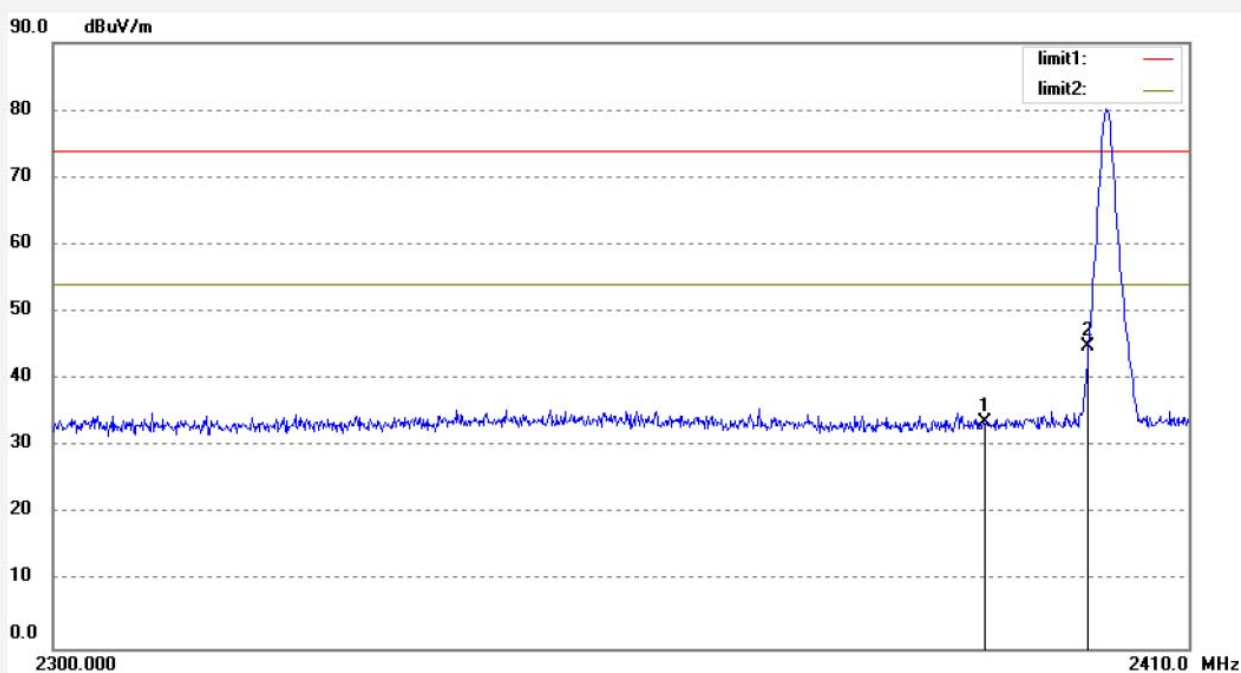
Date: 18/04/10/

Time: 10/02/36

Engineer Signature: Ben

Distance: 3m

Note: Report NO.:ATE20180514



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2390.000	41.75	-8.00	33.75	74.00	-40.25	peak	250	64	
2	2400.000	52.76	-7.97	44.79	74.00	-29.21	peak	250	50	

Job No.: jp #1076

Standard: FCC 15.249

Test item: Radiation Test

Temp.(C)/Hum.(%) 25 C / 55 %

EUT: Alleswolke LTE Dashcam

Mode: TX 2402MHz

Model: UCM 3310

Manufacturer: Nanjing Miaow Planet Technology Co., Ltd

Polarization: Vertical

Power Source: DC 3V

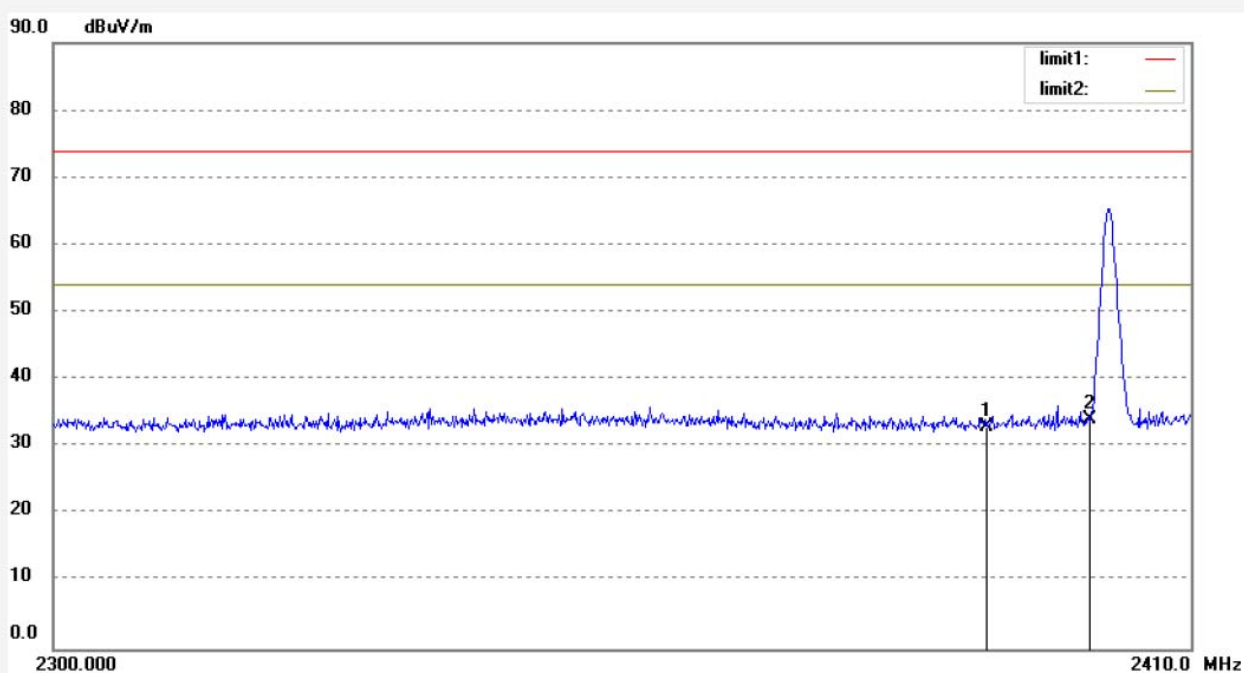
Date: 18/04/10/

Time: 10/01/10

Engineer Signature: Ben

Distance: 3m

Note: Report NO.:ATE20180514



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2390.000	40.97	-8.00	32.97	74.00	-41.03	peak	150	195	
2	2400.000	42.15	-7.97	34.18	74.00	-39.82	peak	150	41	

Job No.: jp #1074

Standard: FCC 15.249

Test item: Radiation Test

Temp.(C)/Hum.(%) 25 C / 55 %

EUT: Alleswolke LTE Dashcam

Mode: TX 2459MHz

Model: UCM 3310

Manufacturer: Nanjing Miaow Planet Technology Co., Ltd

Polarization: Horizontal

Power Source: DC 3V

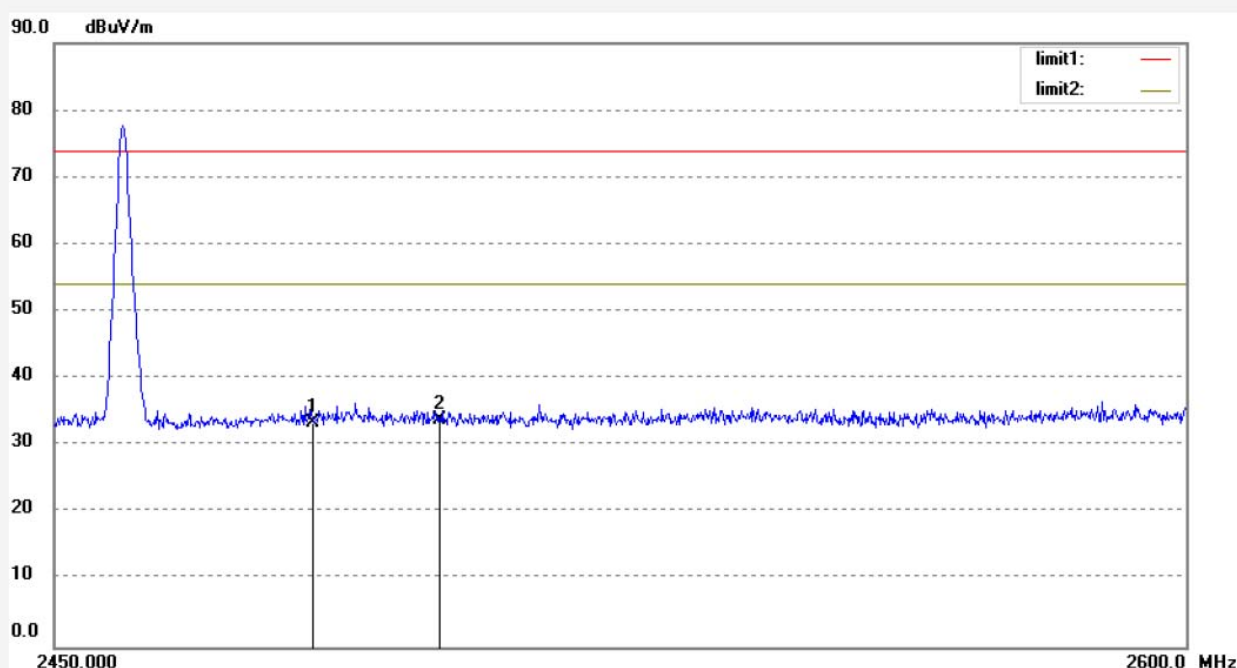
Date: 18/04/10/

Time: 9/56/29

Engineer Signature: Ben

Distance: 3m

Note: Report NO.:ATE20180514



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2483.500	41.18	-7.76	33.42	74.00	-40.58	peak	250	162	
2	2500.000	41.51	-7.71	33.80	74.00	-40.20	peak	250	150	

Job No.: jp #1075

Standard: FCC 15.249

Test item: Radiation Test

Temp.(C)/Hum.(%) 25 C / 55 %

EUT: Alleswolke LTE Dashcam

Mode: TX 2459MHz

Model: UCM 3310

Manufacturer: Nanjing Miaow Planet Technology Co., Ltd

Polarization: Vertical

Power Source: DC 3V

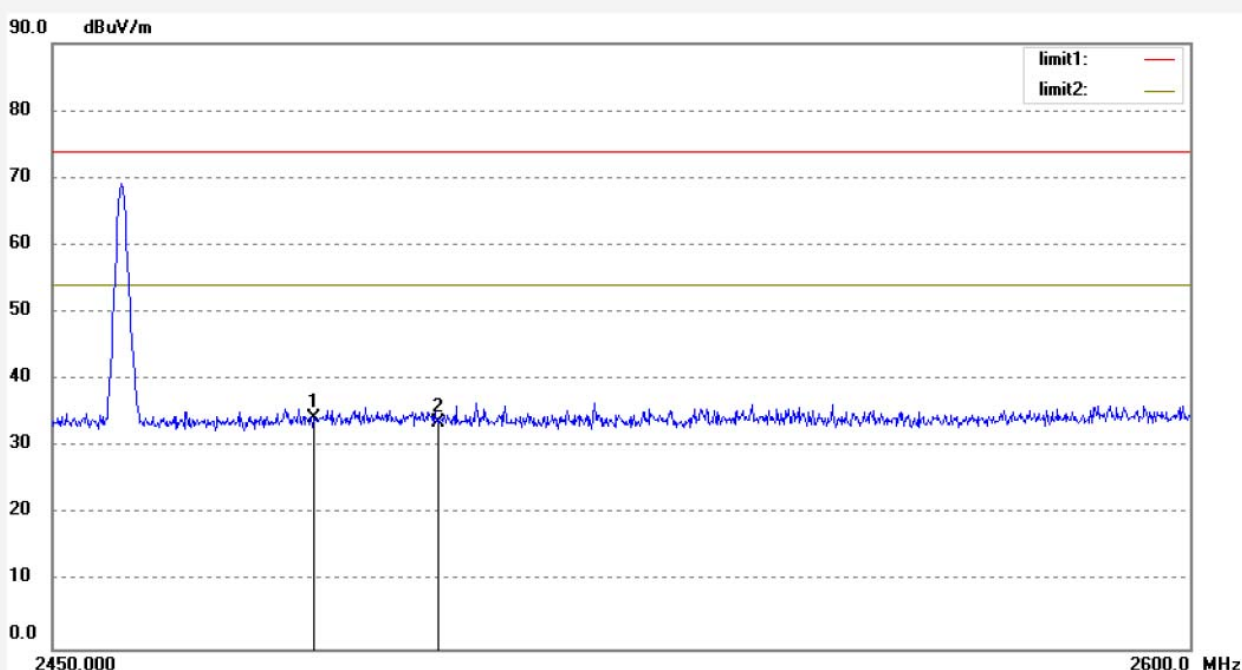
Date: 18/04/10/

Time: 9/57/49

Engineer Signature: Ben

Distance: 3m

Note: Report NO.:ATE20180514



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2483.500	41.97	-7.76	34.21	74.00	-39.79	peak	150	320	
2	2500.000	41.44	-7.71	33.73	74.00	-40.27	peak	150	52	

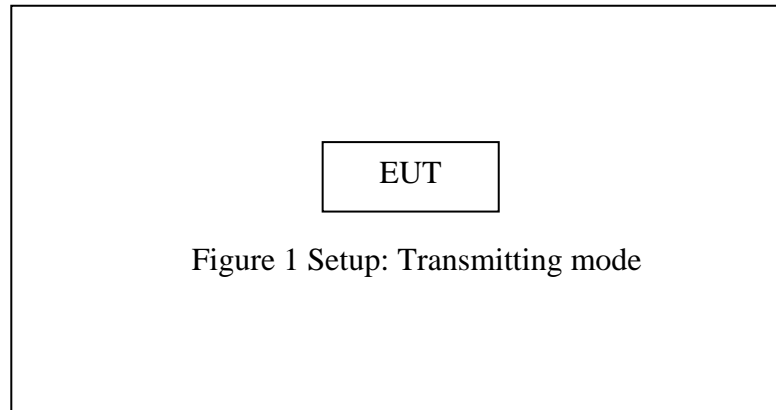
Note:

1. Emissions attenuated more than 20 dB below the permissible value are not reported.
2. The field strength is calculated by adding the antenna factor, high pass filter loss(if used) and cable loss, and subtracting the amplifier gain(if any)from the measured reading. The basic equation calculation is as follows:
Result = Reading + Corrected Factor
3. Display the measurement of peak values.
4. The average measurement was not performed when peak measured data under the limit of average detection.

7. RADIATED SPURIOUS EMISSION TEST

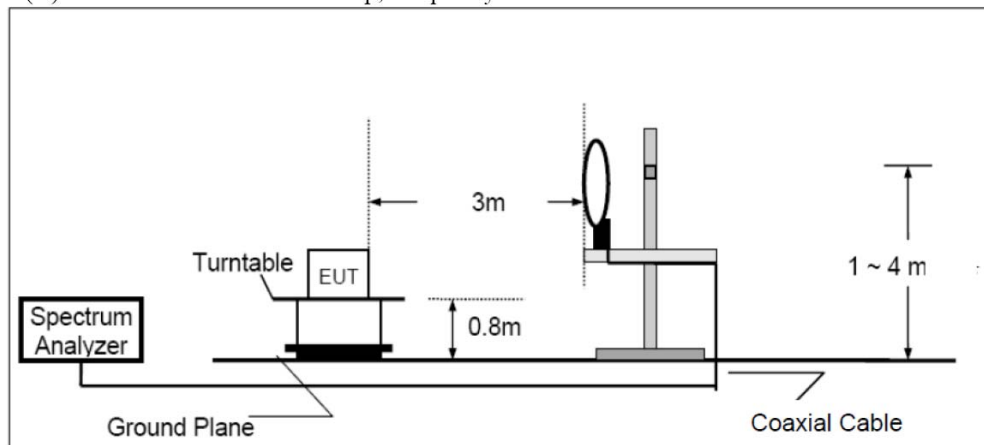
7.1. Block Diagram of Test Setup

7.1.1. Block diagram of connection between the EUT and peripherals

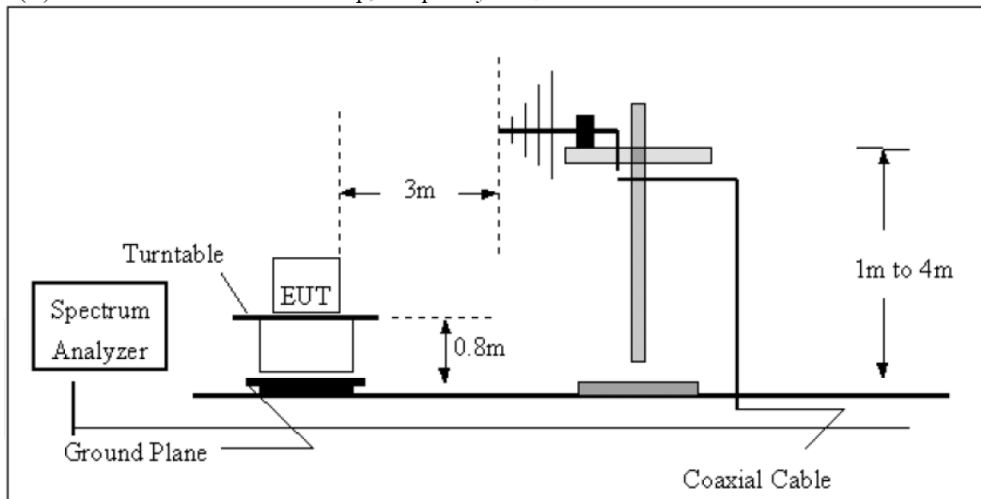


7.1.2. Semi-Anechoic Chamber Test Setup Diagram

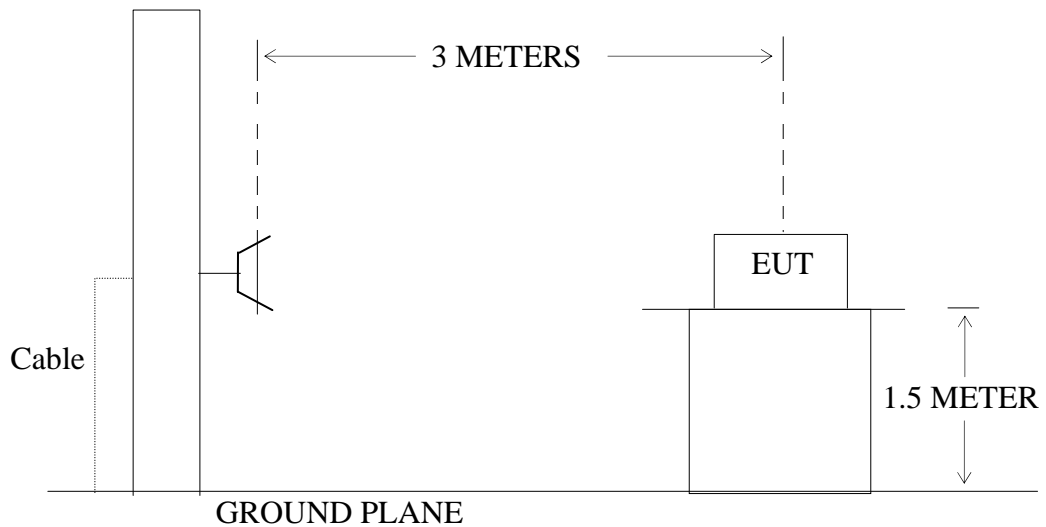
(A) Radiated Emission Test Set-Up, Frequency below 30MHz



(B) Radiated Emission Test Set-Up, Frequency 30-1000MHz



(C) Radiated Emission Test Set-Up, Frequency above 1GHz



7.2.The Limit For Section 15.249

In any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement, provided the transmitter demonstrates compliance with the peak conducted power limits. If the transmitter complies with the conducted power limits based on the use of RMS averaging over a time interval, as permitted under paragraph A8.4(4), the attenuation required under this paragraph shall be 30 dB instead of 20 dB. 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).

7.3.Restricted bands of operation

7.3.1.FCC Part 15.205 Restricted bands of operation

(a) Except as shown in paragraph (d) of this section, Only spurious emissions are permitted in any of the frequency bands listed below:

MHz	MHz	MHz	GHz
0.090-0.110	16.42-16.423	399.9-410	4.5-5.15
¹ 0.495-0.505	16.69475-16.69525	608-614	5.35-5.46
2.1735-2.1905	16.80425-16.80475	960-1240	7.25-7.75
4.125-4.128	25.5-25.67	1300-1427	8.025-8.5
4.17725-4.17775	37.5-38.25	1435-1626.5	9.0-9.2
4.20725-4.20775	73-74.6	1645.5-1646.5	9.3-9.5
6.215-6.218	74.8-75.2	1660-1710	10.6-12.7
6.26775-6.26825	108-121.94	1718.8-1722.2	13.25-13.4
6.31175-6.31225	123-138	2200-2300	14.47-14.5
8.291-8.294	149.9-150.05	2310-2390	15.35-16.2
8.362-8.366	156.52475-156.52525	2483.5-2500	17.7-21.4
8.37625-8.38675	156.7-156.9	2690-2900	22.01-23.12
8.41425-8.41475	162.0125-167.17	3260-3267	23.6-24.0
12.29-12.293	167.72-173.2	3332-3339	31.2-31.8
12.51975-12.52025	240-285	3345.8-3358	36.43-36.5
12.57675-12.57725	322-335.4	3600-4400	(²)
13.36-13.41			

¹Until February 1, 1999, this restricted band shall be 0.490-0.510

²Above 38.6

(b) Except as provided in paragraphs (d) and (e), the field strength of emission appearing within these frequency bands shall not exceed the limits shown in Section 15.209. At frequencies equal to or less than 1000MHz, Compliance with the limits in Section 15.209 shall be demonstrated using measurement instrumentation employing a CISPR quasi-peak detector. Above 1000MHz, compliance with the emission limits in Section 15.209 shall be demonstrated based on the average value of the measured emissions. The provisions in Section 15.35 apply to these measurements.

7.4.Configuration of EUT on Measurement

The equipment are installed on Radiated Emission Measurement to meet the commission requirements and operating regulations in a manner which tends to maximize its emission characteristics in normal application.

7.5. Operating Condition of EUT

7.5.1. Setup the EUT and simulator as shown as Section 7.1.

7.5.2. Turn on the power of all equipment.

7.5.3. Let the EUT work in TX modes and measure it. The transmit frequency are 2402, 2432, 2459MHz.

7.6. Test Procedure

The EUT and its simulators are placed on a turntable, which is 0.8 meter (Below 1GHz) and 1.5m (above 1GHz) high above ground. The turntable can rotate 360 degrees to determine the position of the maximum emission level. EUT is set 3.0 meters away from the receiving antenna, which is mounted on an antenna tower. The antenna can be moved up and down between 1.0 meter and 4 meters to find out the maximum emission level. Broadband antenna (calibrated bilog antenna) is used as receiving antenna. Both horizontal and vertical polarizations of the antenna are set on measurement. In order to find the maximum emission levels, all of the interface cables must be manipulated according to ANSI C63.10: 2013 on radiated emission measurement. The EUT was tested in 3 orthogonal planes.

The bandwidth of test receiver is set at 9 kHz in below 30MHz. and set at 120 kHz in 30-1000MHz, and 1MHz in above 1000MHz.

The frequency range from 9 kHz to 25GHz is checked.

The final measurement in band 9-90 kHz, 110-490 kHz and above 1000MHz is performed with Average detector. Except those frequency bands mention above, the final measurement for frequencies below 1000MHz is performed with Quasi Peak detector.

RBW (120 kHz), VBW (300 kHz) for QP detector below 1GHz

Peak detector above 1GHz

RBW (1 MHz), VBW (3MHz) for Peak measurement

RBW (1 MHz), VBW (10Hz) for AV measurement

The field strength is calculated by adding the antenna factor, and cable loss, and subtracting the amplifier gain from the measured reading. The basic equation calculation is as follows:

Result = Reading + Corrected Factor

Where Corrected Factor = Antenna Factor + Cable Loss – Amplifier Gain

7.7.The Field Strength of Radiation Emission Measurement Results

PASS.

Note: 1. Emissions attenuated more than 20 dB below the permissible value are not reported.

2. *: Denotes restricted band of operation.

3. The EUT is tested radiation emission in three axes. The worst emissions are reported in all channels.

4. The radiation emissions from 9KHz-30MHz and 18GHz-25GHz are not reported, because the test values lower than the limits of 20dB.

5. The average measurement was not performed when peak measured data under the limit of average detection.

30MHz-1GHz



ACCURATE TECHNOLOGY CO., LTD.

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Fax:+86-0755-26503396

Job No.: jp #1082

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

Temp.(C)/Hum.(%) 25 C / 55 %

EUT: Alleswolke LTE Dashcam

Mode: TX 2402MHz

Model: UCM 3310

Manufacturer: Nanjing Miaow Planet Technology Co., Ltd

Polarization: Horizontal

Power Source: DC 3V

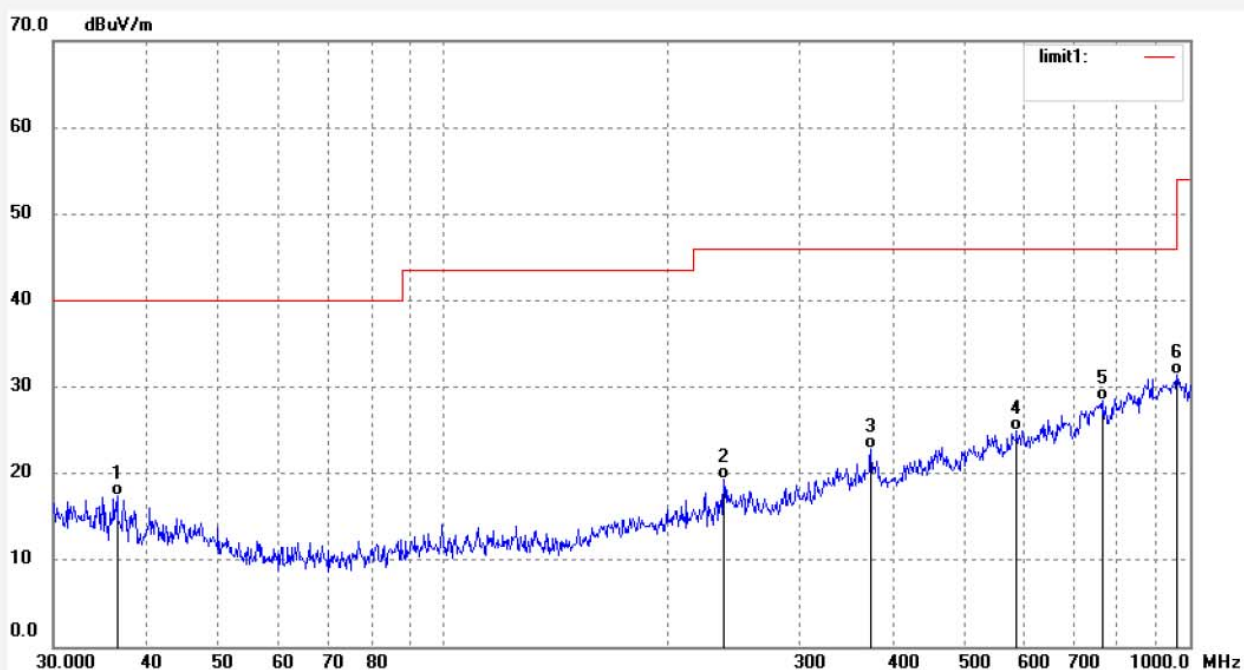
Date: 18/04/10/

Time: 10/12/17

Engineer Signature: Ben

Distance: 3m

Note: Report NO.:ATE20180514



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	36.5236	35.49	-18.00	17.49	40.00	-22.51	QP	200	195	
2	237.6262	37.64	-18.27	19.37	46.00	-26.63	QP	200	56	
3	373.8861	36.98	-14.19	22.79	46.00	-23.21	QP	200	105	
4	586.2172	35.25	-10.23	25.02	46.00	-20.98	QP	200	46	
5	765.6481	34.93	-6.46	28.47	46.00	-17.53	QP	200	24	
6	962.0878	34.63	-3.25	31.38	54.00	-22.62	QP	200	106	

Job No.: jp #1083

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

Temp.(C)/Hum.(%) 25 C / 55 %

EUT: Alleswolke LTE Dashcam

Mode: TX 2402MHz

Model: UCM 3310

Manufacturer: Nanjing Miaow Planet Technology Co., Ltd

Polarization: Vertical

Power Source: DC 3V

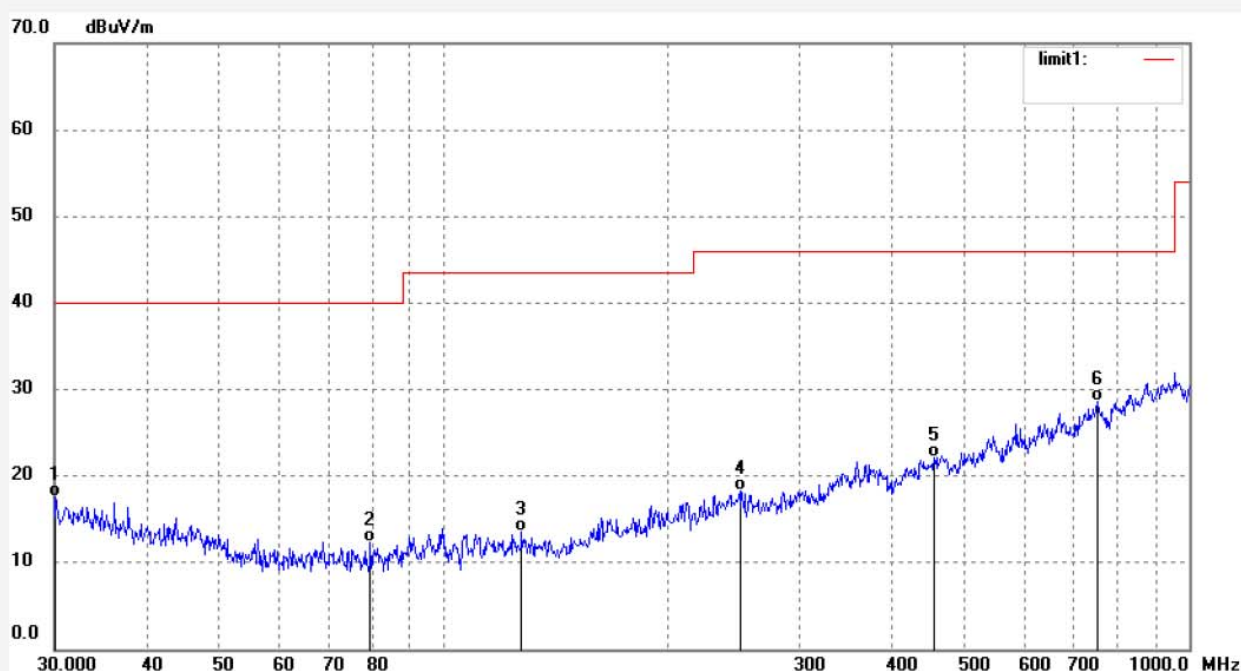
Date: 18/04/10/

Time: 10/13/17

Engineer Signature: Ben

Distance: 3m

Note: Report NO.:ATE20180514



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	30.0000	34.45	-16.80	17.65	40.00	-22.35	QP	100	106	
2	79.6764	35.20	-22.89	12.31	40.00	-27.69	QP	100	210	
3	127.1389	35.21	-21.63	13.58	43.50	-29.92	QP	100	213	
4	249.6074	36.44	-18.17	18.27	46.00	-27.73	QP	100	298	
5	455.1888	35.07	-12.87	22.20	46.00	-23.80	QP	100	95	
6	752.3147	35.37	-6.71	28.66	46.00	-17.34	QP	100	64	

Job No.: jp #1085

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

Temp.(C)/Hum.(%) 25 C / 55 %

EUT: Alleswolke LTE Dashcam

Mode: TX 2432MHz

Model: UCM 3310

Manufacturer: Nanjing Miaow Planet Technology Co., Ltd

Polarization: Horizontal

Power Source: DC 3V

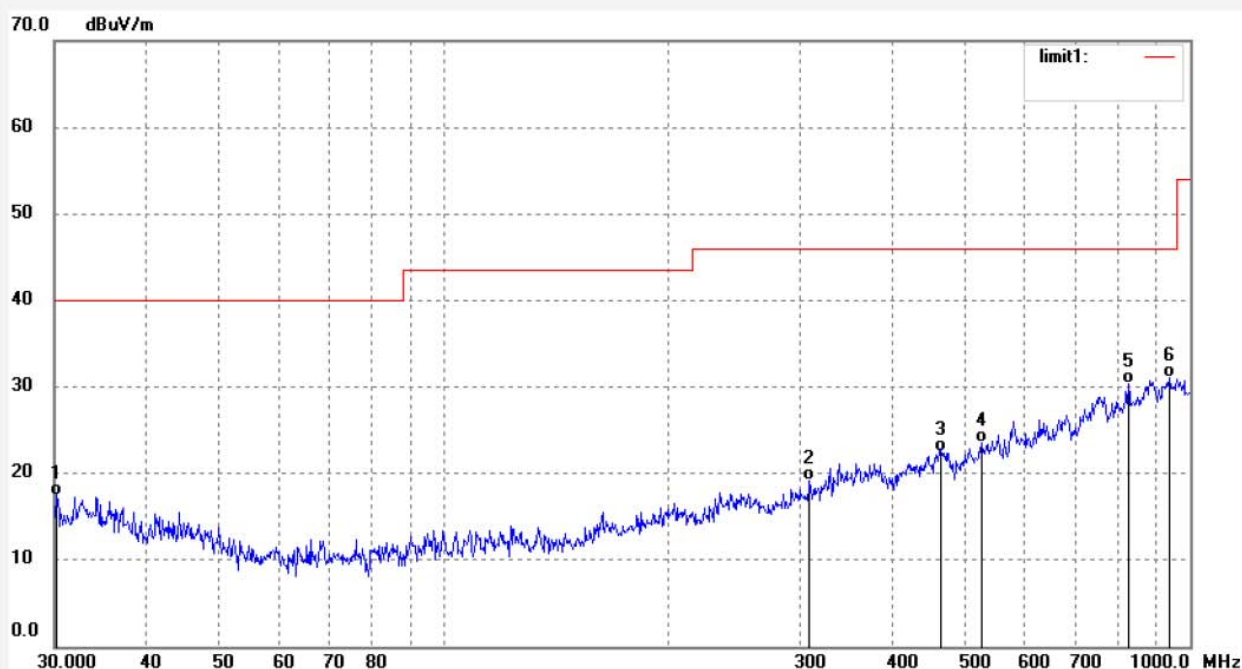
Date: 18/04/10/

Time: 10/15/08

Engineer Signature: Ben

Distance: 3m

Note: Report NO.:ATE20180514



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	30.2116	34.33	-16.83	17.50	40.00	-22.50	QP	200	102	
2	309.2710	35.31	-16.10	19.21	46.00	-26.79	QP	200	94	
3	461.6313	35.14	-12.70	22.44	46.00	-23.56	QP	200	210	
4	525.7201	35.18	-11.65	23.53	46.00	-22.47	QP	200	126	
5	827.1794	35.86	-5.43	30.43	46.00	-15.57	QP	200	40	
6	938.7138	34.58	-3.60	30.98	46.00	-15.02	QP	200	168	

Job No.: jp #1084

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

Temp.(C)/Hum.(%) 25 C / 55 %

EUT: Alleswolke LTE Dashcam

Mode: TX 2432MHz

Model: UCM 3310

Manufacturer: Nanjing Miaow Planet Technology Co., Ltd

Polarization: Vertical

Power Source: DC 3V

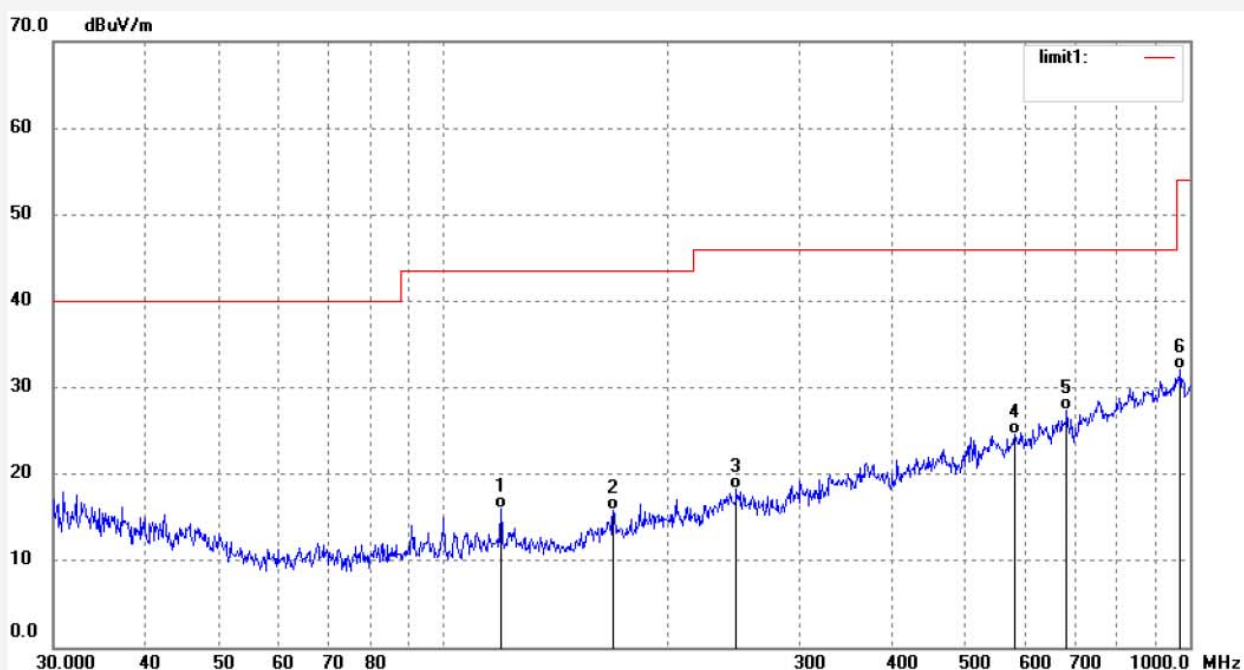
Date: 18/04/10/

Time: 10/14/11

Engineer Signature: Ben

Distance: 3m

Note: Report NO.:ATE20180514



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	119.3470	37.39	-21.31	16.08	43.50	-27.42	QP	100	108	
2	168.9970	36.28	-20.39	15.89	43.50	-27.61	QP	100	163	
3	246.9901	36.51	-18.19	18.32	46.00	-27.68	QP	100	106	
4	582.1122	34.84	-10.33	24.51	46.00	-21.49	QP	100	54	
5	684.2259	35.64	-8.25	27.39	46.00	-18.61	QP	100	263	
6	972.2826	35.13	-3.10	32.03	54.00	-21.97	QP	100	106	

Job No.: jp #1086

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

Temp.(C)/Hum.(%) 25 C / 55 %

EUT: Alleswolke LTE Dashcam

Mode: TX 2459MHz

Model: UCM 3310

Manufacturer: Nanjing Miaow Planet Technology Co., Ltd

Polarization: Horizontal

Power Source: DC 3V

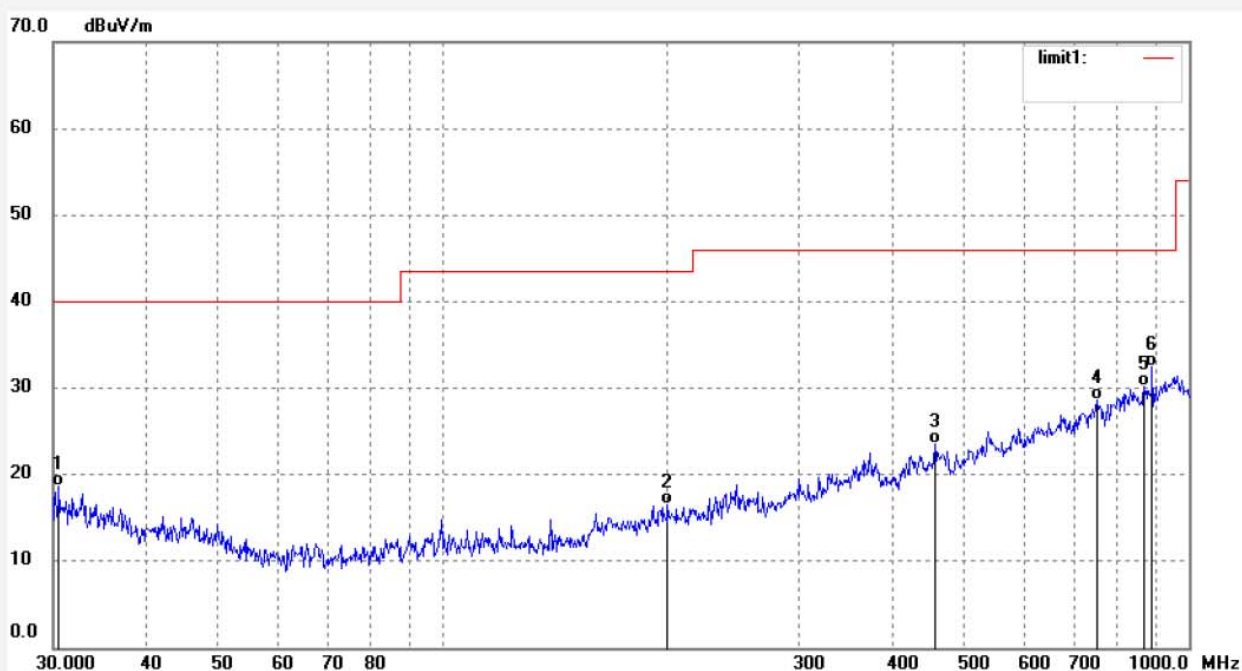
Date: 18/04/10/

Time: 10/16/18

Engineer Signature: Ben

Distance: 3m

Note: Report NO.:ATE20180514



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	30.5317	35.51	-16.88	18.63	40.00	-21.37	QP	200	63	
2	200.0432	35.23	-18.71	16.52	43.50	-26.98	QP	200	210	
3	456.7909	36.33	-12.83	23.50	46.00	-22.50	QP	200	100	
4	754.9628	35.26	-6.65	28.61	46.00	-17.39	QP	200	255	
5	871.9442	34.93	-4.67	30.26	46.00	-15.74	QP	200	230	
6	893.6557	36.77	-4.28	32.49	46.00	-13.51	QP	200	130	

Job No.: jp #1087

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

Temp.(C)/Hum.(%) 25 C / 55 %

EUT: Alleswolke LTE Dashcam

Mode: TX 2459MHz

Model: UCM 3310

Manufacturer: Nanjing Miaow Planet Technology Co., Ltd

Polarization: Vertical

Power Source: DC 3V

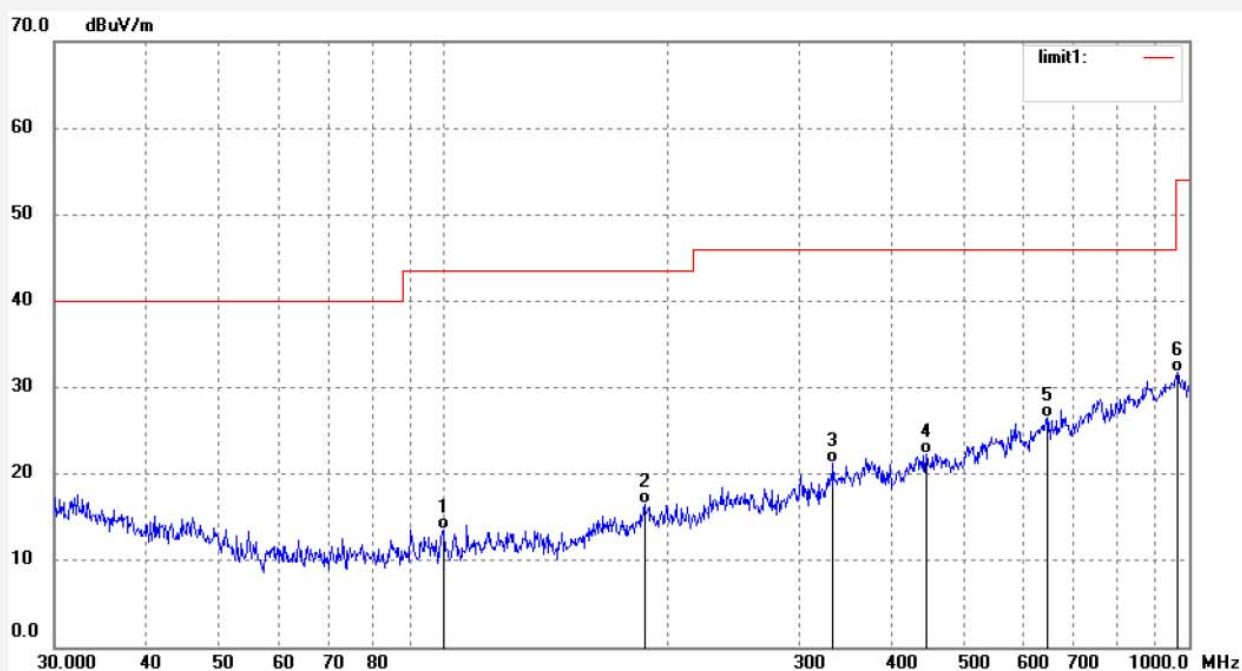
Date: 18/04/10/

Time: 10/17/26

Engineer Signature: Ben

Distance: 3m

Note: Report NO.:ATE20180514



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	100.1187	35.30	-21.71	13.59	43.50	-29.91	QP	100	192	
2	185.8143	36.30	-19.80	16.50	43.50	-27.00	QP	100	231	
3	332.9534	36.53	-15.22	21.31	46.00	-24.69	QP	100	201	
4	444.1299	35.39	-13.13	22.26	46.00	-23.74	QP	100	67	
5	646.8216	35.42	-8.91	26.51	46.00	-19.49	QP	100	102	
6	965.4741	34.95	-3.20	31.75	54.00	-22.25	QP	100	193	

1GHz-18GHz



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Site: 1# Chamber

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Fax:+86-0755-26503396

Job No.: jp #1078

Standard: FCC 15.249

Test item: Radiation Test

Temp.(C)/Hum.(%) 25 C / 55 %

EUT: Alleswolke LTE Dashcam

Mode: TX 2402MHz

Model: UCM 3310

Manufacturer: Nanjing Miaow Planet Technology Co., Ltd

Polarization: Horizontal

Power Source: DC 3V

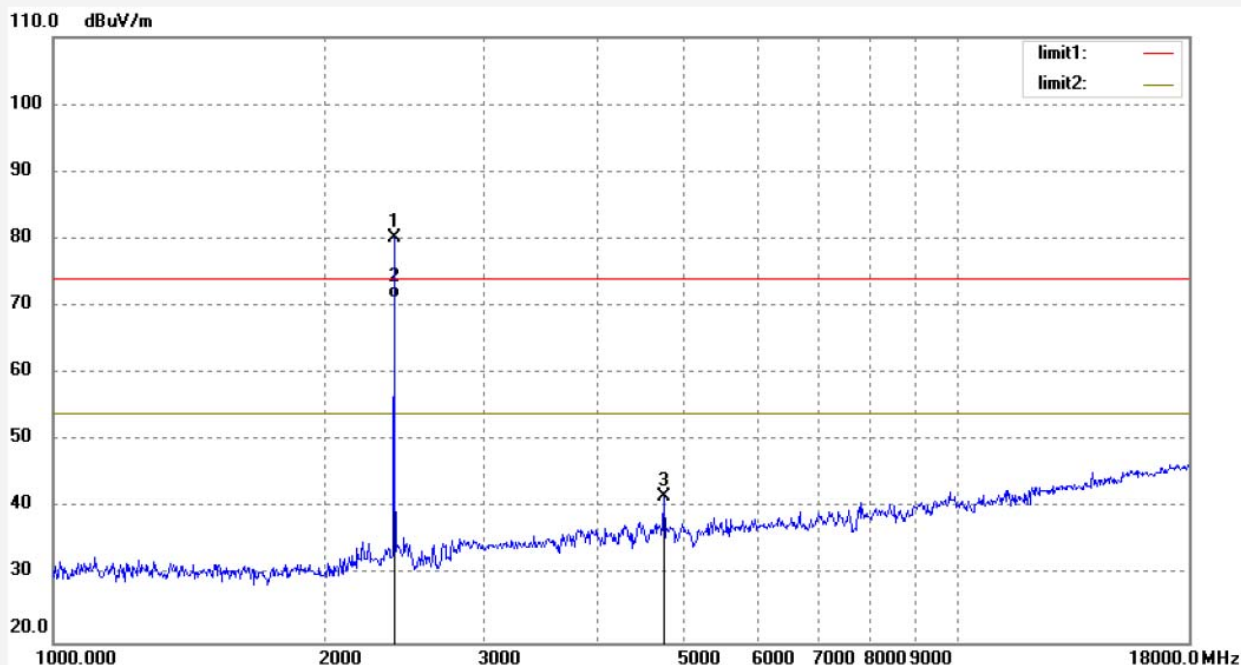
Date: 18/04/10/

Time: 10/03/59

Engineer Signature: Ben

Distance: 3m

Note: Report NO.:ATE20180514



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2402.019	88.21	-8.03	80.18	114.00	-33.82	peak	250	107	
2	2402.019	79.26	-8.03	71.23	94.00	-22.77	AVG	250	106	
3	4804.057	44.27	-2.53	41.74	74.00	-32.26	peak	250	98	

Job No.: jp #1079

Standard: FCC 15.249

Test item: Radiation Test

Temp.(C)/Hum.(%) 25 C / 55 %

EUT: Alleswolke LTE Dashcam

Mode: TX 2402MHz

Model: UCM 3310

Manufacturer: Nanjing Miaow Planet Technology Co., Ltd

Polarization: Vertical

Power Source: DC 3V

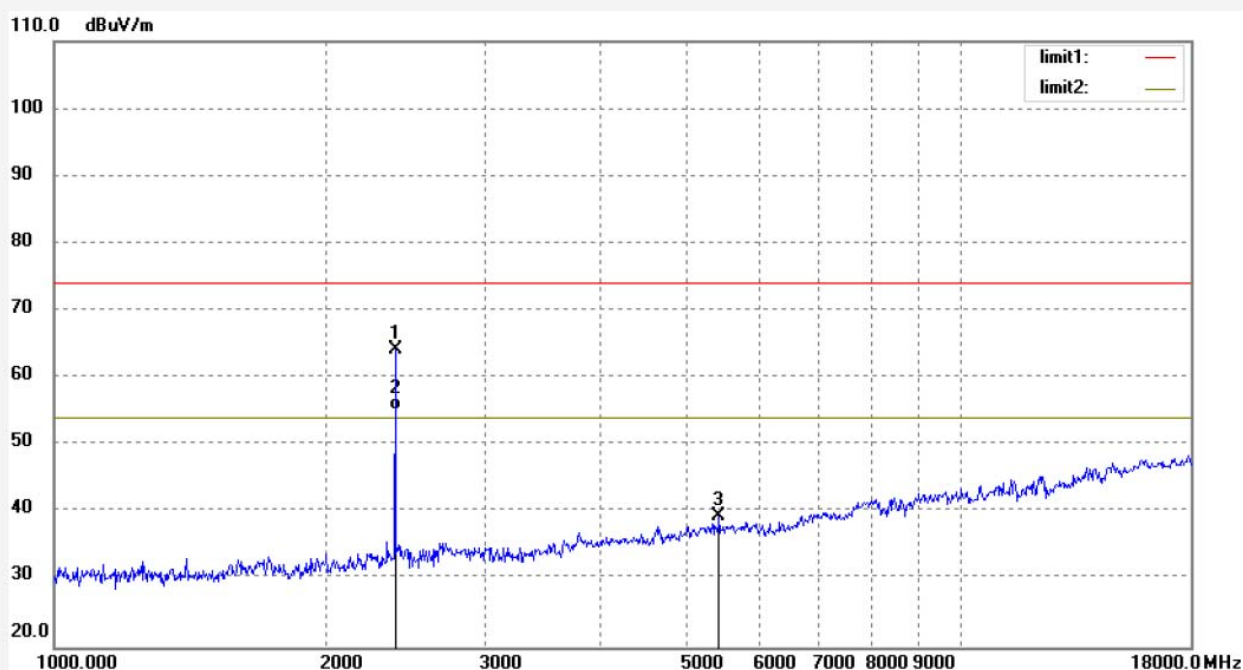
Date: 18/04/10/

Time: 10/05/30

Engineer Signature: Ben

Distance: 3m

Note: Report NO.:ATE20180514



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2402.019	72.28	-8.03	64.25	114.00	-49.75	peak	150	130	
2	2402.019	63.16	-8.03	55.13	94.00	-38.87	AVG	150	204	
3	5425.684	40.37	-0.92	39.45	74.00	-34.55	peak	150	61	

Job No.: jp #1081

Standard: FCC 15.249

Test item: Radiation Test

Temp.(C)/Hum.(%) 25 C / 55 %

EUT: Alleswolke LTE Dashcam

Mode: TX 2432MHz

Model: UCM 3310

Manufacturer: Nanjing Miaow Planet Technology Co., Ltd

Polarization: Horizontal

Power Source: DC 3V

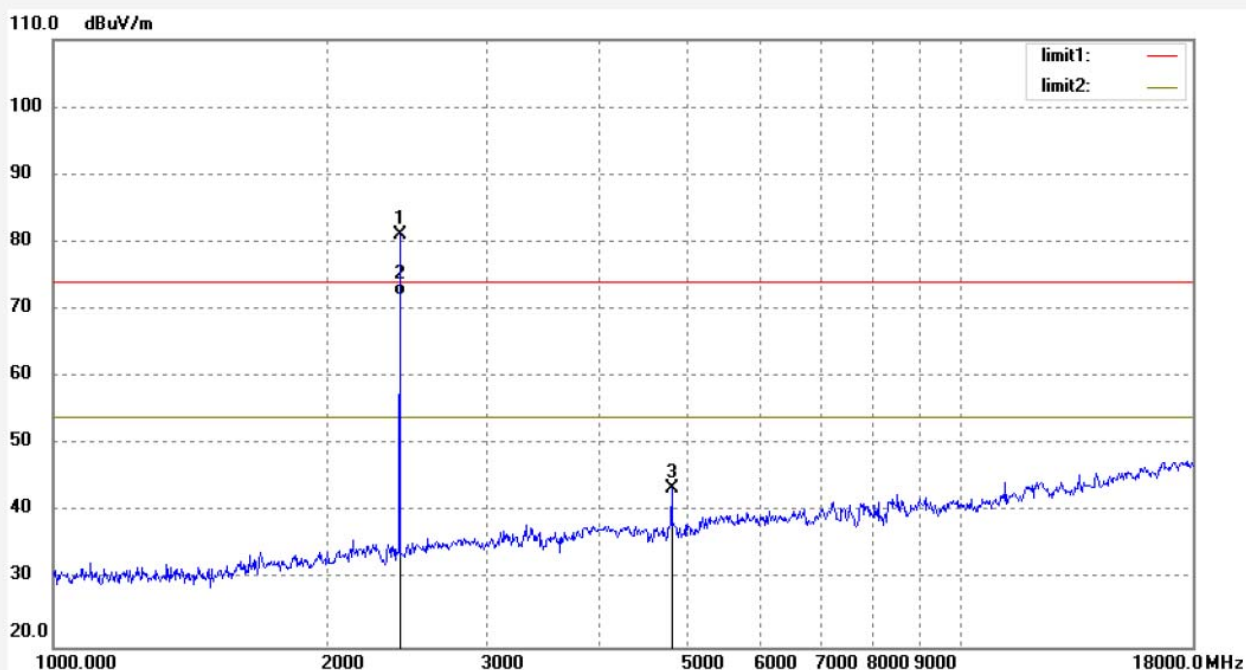
Date: 18/04/10/

Time: 10/08/48

Engineer Signature: Ben

Distance: 3m

Note: Report NO.:ATE20180514



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2432.000	89.08	-7.96	81.12	114.00	-32.88	peak	200	102	
2	2432.000	80.15	-7.96	72.19	94.00	-21.81	AVG	200	106	
3	4864.028	45.79	-2.30	43.49	74.00	-30.51	peak	200	138	



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Site: 1# Chamber

Tel:+86-0755-26503290

Fax:+86-0755-26503396

Job No.: jp #1080

Standard: FCC 15.249

Test item: Radiation Test

Temp.(C)/Hum.(%) 25 C / 55 %

EUT: Alleswolke LTE Dashcam

Mode: TX 2432MHz

Model: UCM 3310

Manufacturer: Nanjing Miaow Planet Technology Co., Ltd

Polarization: Vertical

Power Source: DC 3V

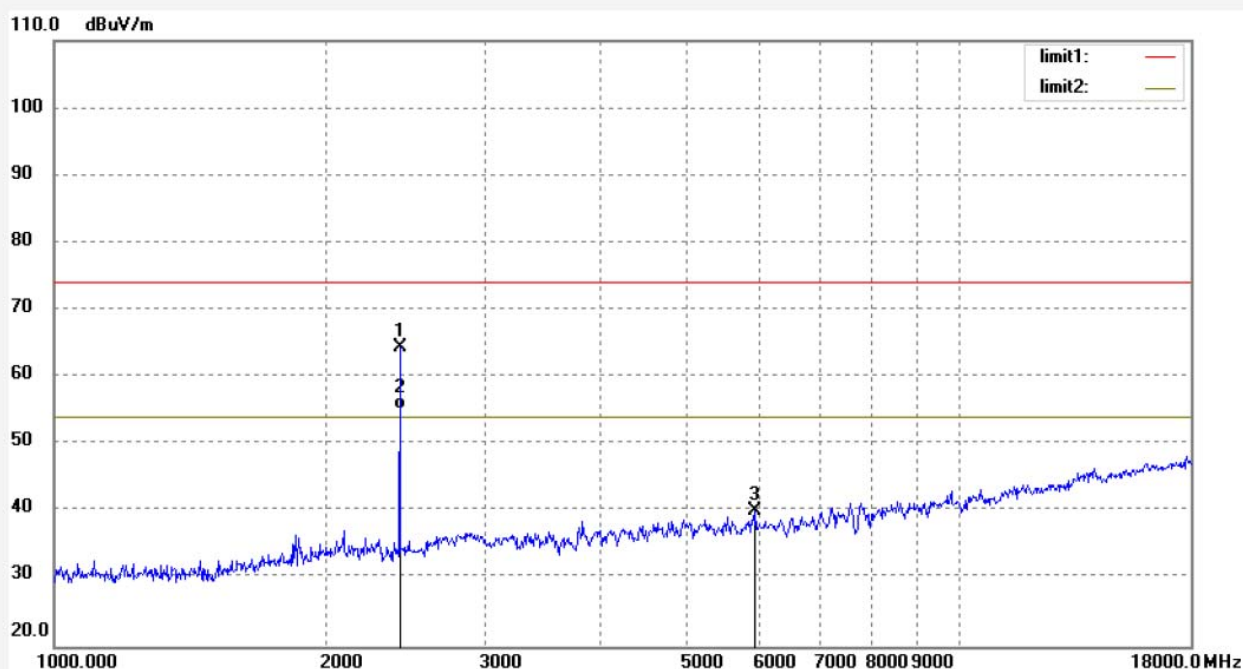
Date: 18/04/10/

Time: 10/07/18

Engineer Signature: Ben

Distance: 3m

Note: Report NO.:ATE20180514



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2432.000	72.44	-7.96	64.48	114.00	-49.52	peak	150	320	
2	2432.000	63.26	-7.96	55.30	94.00	-38.70	AVG	150	285	
3	5955.338	40.03	0.05	40.08	74.00	-33.92	peak	150	196	

Job No.: JP #1073

Standard: FCC 15.249

Test item: Radiation Test

Temp.(C)/Hum.(%) 25 C / 55 %

EUT: Alleswolke LTE Dashcam

Mode: TX 2459MHz

Model: UCM 3310

Manufacturer: Nanjing Miaow Planet Technology Co., Ltd

Polarization: Horizontal

Power Source: DC 3V

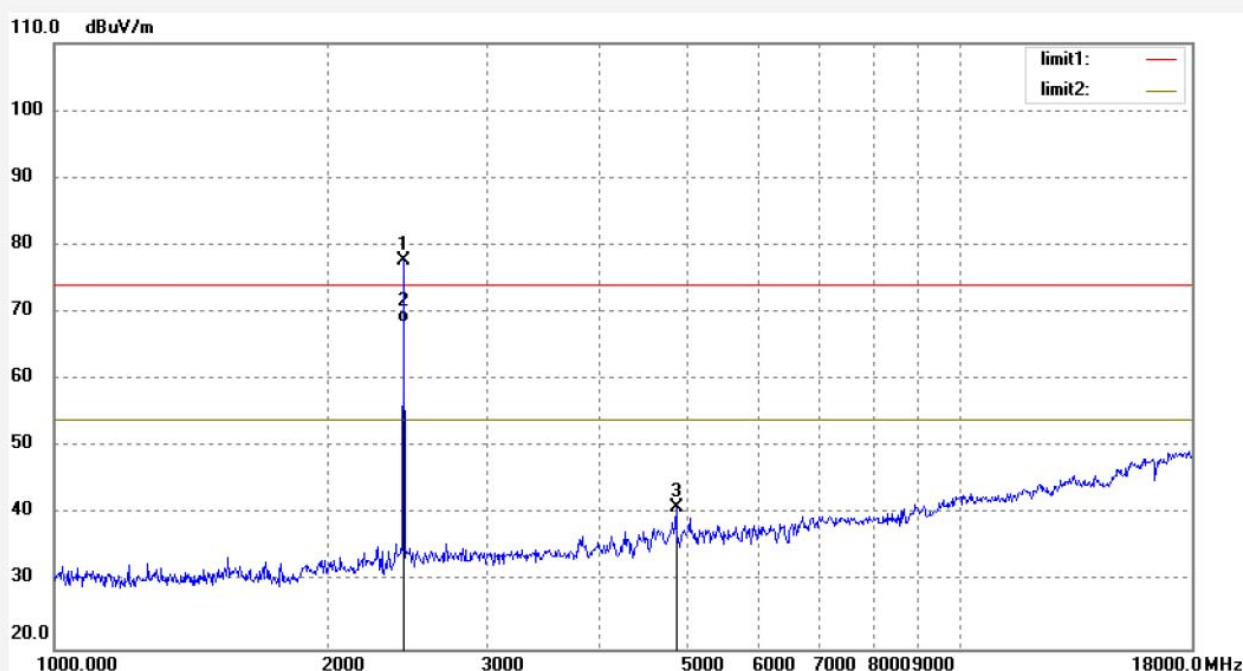
Date: 18/04/10/

Time: 9/53/38

Engineer Signature: Ben

Distance: 3m

Note: Report NO.:ATE20180514



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2459.024	85.53	-7.90	77.63	114.00	-36.37	peak	150	152	
2	2459.024	76.34	-7.90	68.44	94.00	-25.56	AVG	150	149	
3	4918.057	43.12	-2.10	41.02	74.00	-32.98	peak	150	320	



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Report No.: ATE20180514

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Site: 1# Chamber

Tel:+86-0755-26503290

Fax:+86-0755-26503396

Job No.: jp #1072

Standard: FCC 15.249

Test item: Radiation Test

Temp.(C)/Hum.(%) 25 C / 55 %

EUT: Alleswolke LTE Dashcam

Mode: TX 2459MHz

Model: UCM 3310

Manufacturer: Nanjing Miaow Planet Technology Co., Ltd

Polarization: Vertical

Power Source: DC 3V

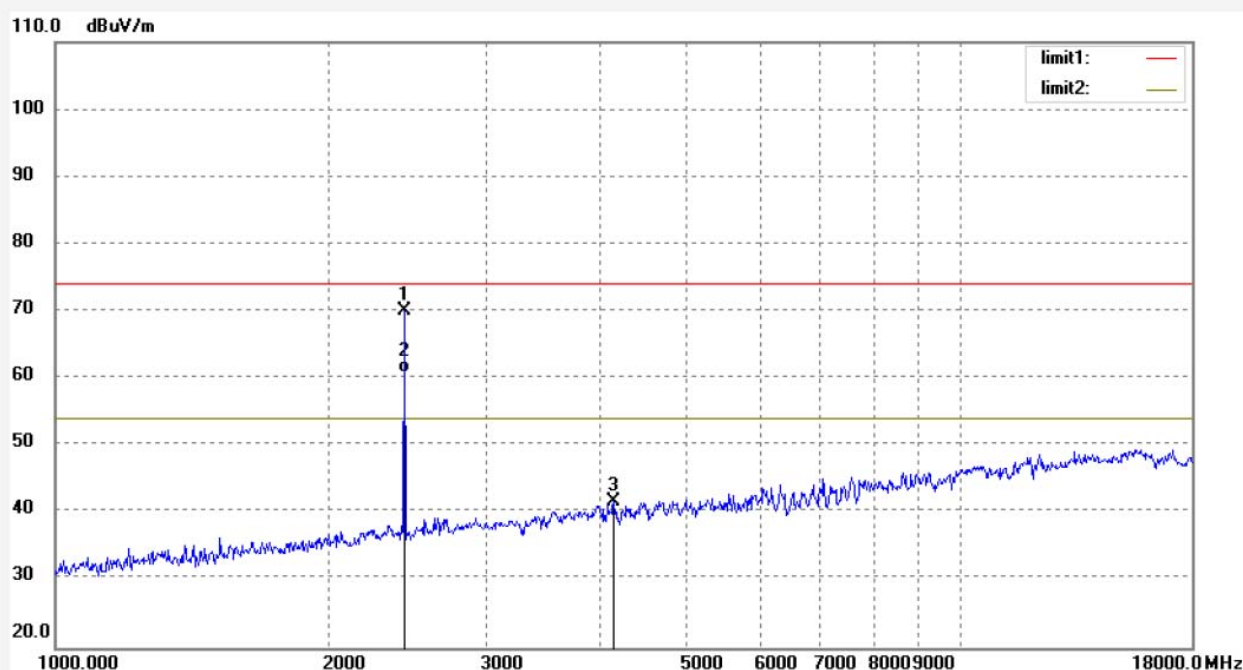
Date: 18/04/10/

Time: 9/52/14

Engineer Signature: Ben

Distance: 3m

Note: Report NO.:ATE20180514



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2459.024	77.99	-7.90	70.09	114.00	-43.91	peak	150	123	
2	2459.024	68.64	-7.90	60.74	94.00	-33.26	AVG	150	120	
3	4138.960	45.10	-3.30	41.80	74.00	-32.20	peak	150	86	

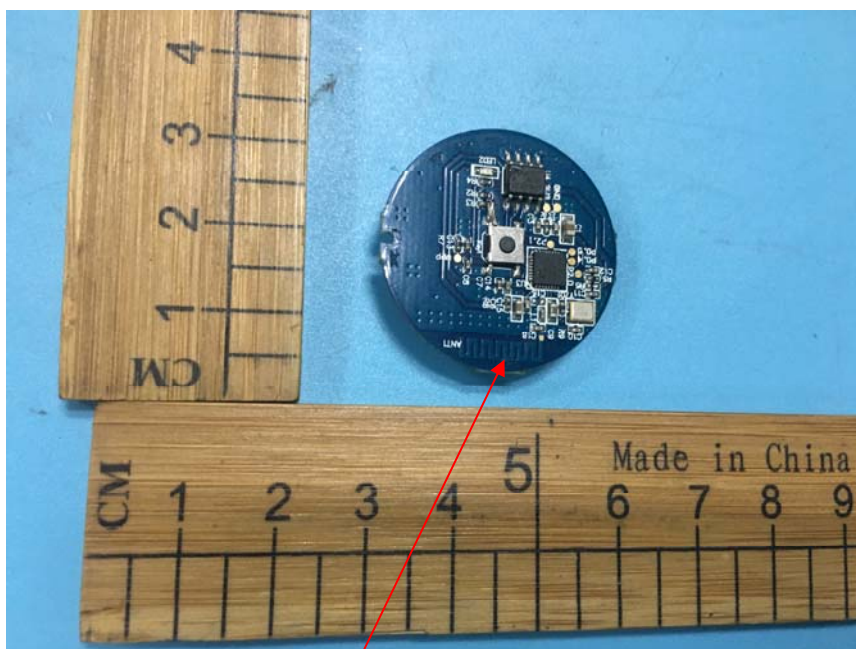
8. ANTENNA REQUIREMENT

8.1.The Requirement

According to Section 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.

8.2.Antenna Construction

Device is equipped with permanent attached antenna, which isn't displaced by other antenna. The Antenna gain of EUT is 0dBi. Therefore, the equipment complies with the antenna requirement of Section 15.203.



Antenna