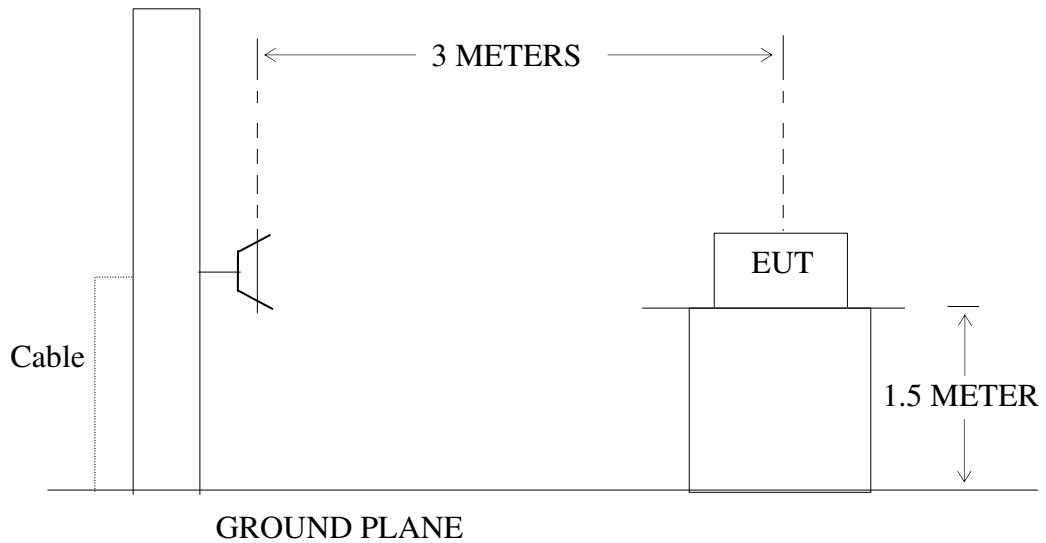


(C) Radiated Emission Test Set-Up, Frequency above 1GHz



## 10.2.The Limit For Section 15.247(d)

Section 15.247(d): 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 (b)(3) of this section, 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).

### 10.3.Restricted bands of operation

#### 10.3.1.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         |
| <sup>1</sup> 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     | ( <sup>2</sup> ) |
| 13.36-13.41              |                     |               |                  |

<sup>1</sup>Until February 1, 1999, this restricted band shall be 0.490-0.510

<sup>2</sup>Above 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.

### 10.4.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.

## 10.5. Operating Condition of EUT

10.5.1. Setup the EUT and simulator as shown as Section 10.1.

10.5.2. Turn on the power of all equipment.

10.5.3. Let the EUT work in TX modes measure it. The transmit frequency are 2412-2462 and 2422-2452MHz. We select 2412MHz, 2437MHz, 2462MHz and 2422MHz, 2437MHz, 2452MHz TX frequency to transmit.

## 10.6. Test Procedure

The EUT and its simulators are placed on a turntable, which is 0.8 meter high above ground (Below 1GHz). The EUT and its simulators are placed on a turntable, which is 1.5 meter high above ground (Above 1GHz). 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 bi-log 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 EUT location must be manipulated according to ANSI C63.10:2013 on radiated emission measurement. The EUT was tested in 3 orthogonal planes.

The worst-case data rate for this channel to be 1Mbps for 802.11b mode and 6Mbps for 802.11g mode and 150Mbps for 802.11n mode, based on previous with 802.11 WLAN product design architectures.

The frequency range from 30MHz to 25000MHz is checked.

Result = Reading + Corrected Factor

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

During the radiated emission test, the spectrum analyzer was set with the following configurations:

1. The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 120kHz for Quasi-peak at frequency below 1GHz.
2. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and video bandwidth is 3MHz for peak measurement with peak detector at frequency above 1GHz.
3. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and video bandwidth is 10Hz for Average measurement with peak detection at frequency above 1GHz.
4. All modes of operation were investigated and the worst-case emissions are reported.

## 10.7. The Field Strength of Radiation Emission Measurement Results

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

2. \*: Denotes restricted band of operation.

3. The fundamental radiated emissions were reduced by Band Reject Filter in the attached plots.

4. The EUT is tested radiation emission at each test mode (802.11 b/g/n) in three axes. The worst emissions are reported in all test mode and channels.

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



## Below 1G



### ACCURATE TECHNOLOGY CO., LTD.

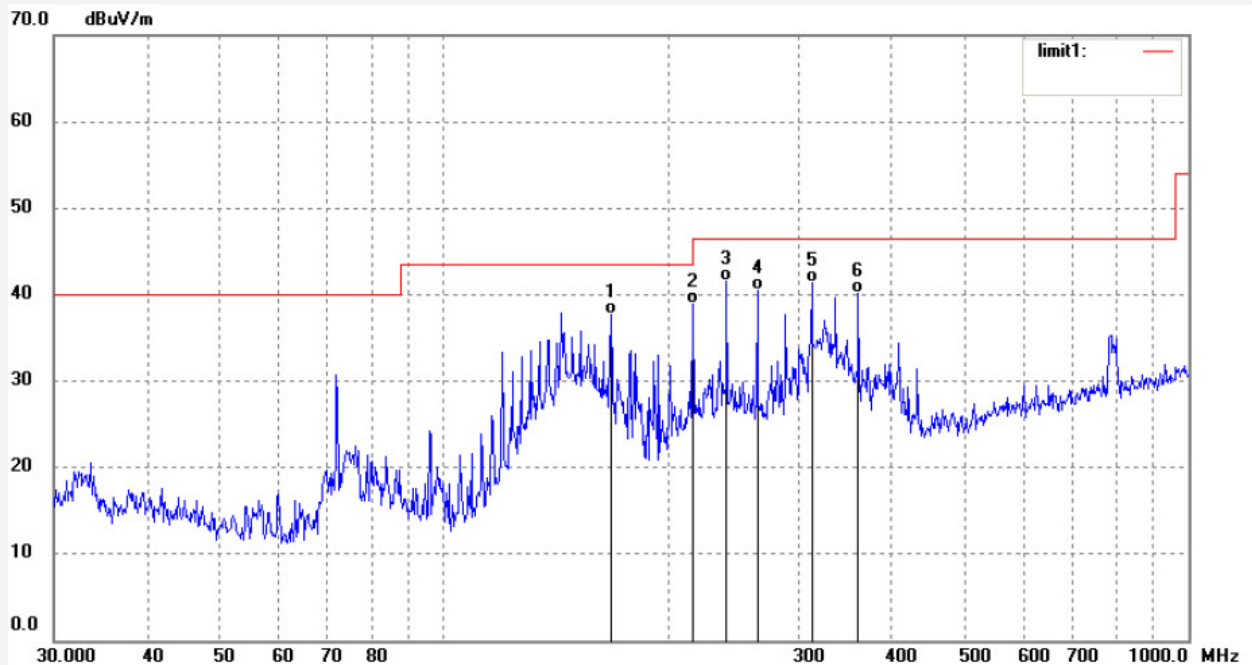
F1,Bldg,A,Changyuan New Material Port Keyuan Rd,  
Science & Industry Park,Nanshan Shenzhen,P.R.China

Site: 2# Chamber  
Tel:+86-0755-26503290  
Fax:+86-0755-26503396

Job No.: DING #844  
Standard: FCC Class B 3M Radiated  
Test item: Radiation Test  
Temp.( C)/Hum.(%) 23 C / 48 %  
EUT: MivaTek Low Power Wi-Fi Module  
Mode: TX 2412MHz(802.11b)  
Model: MODCC32  
Manufacturer: Power 7 Technology(Dongguan)Co., Ltd

Polarization: Horizontal  
Power Source: DC 3.3V  
Date: 2016/11/05  
Time: 17:22:09  
Engineer Signature:  
Distance: 3m

Note: Report NO.:ATE20162251

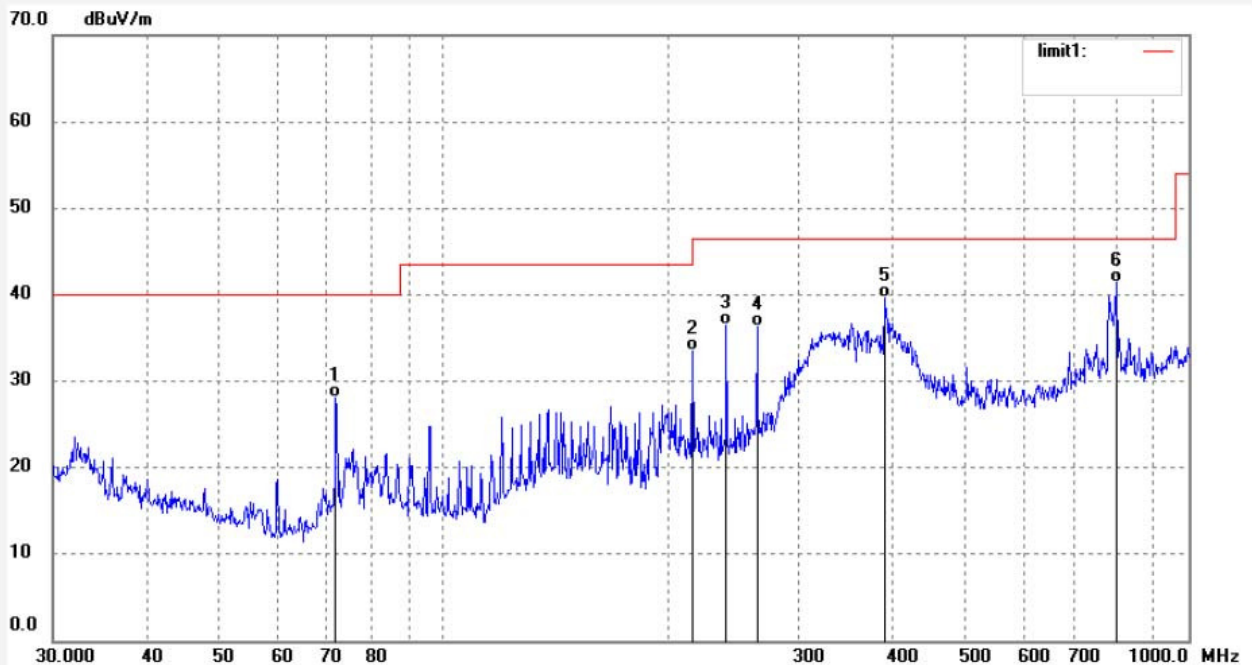


| No. | Freq. (MHz) | Reading (dBuV/m) | Factor (dB) | Result (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Detector | Height (cm) | Degree (deg.) | Remark |
|-----|-------------|------------------|-------------|-----------------|----------------|-------------|----------|-------------|---------------|--------|
| 1   | 167.8243    | 49.02            | -11.22      | 37.80           | 43.50          | -5.70       | QP       |             |               |        |
| 2   | 216.0240    | 48.57            | -9.66       | 38.91           | 46.40          | -7.49       | QP       |             |               |        |
| 3   | 239.9874    | 50.86            | -9.33       | 41.53           | 46.40          | -4.87       | QP       |             |               |        |
| 4   | 263.8190    | 47.81            | -7.31       | 40.50           | 46.40          | -5.90       | QP       |             |               |        |
| 5   | 312.1794    | 48.10            | -6.66       | 41.44           | 46.40          | -4.96       | QP       |             |               |        |
| 6   | 360.4476    | 44.71            | -4.54       | 40.17           | 46.40          | -6.23       | QP       |             |               |        |

Job No.: DING #843  
Standard: FCC Class B 3M Radiated  
Test item: Radiation Test  
Temp.( C)/Hum.(%) 23 C / 48 %  
EUT: Miva Tek Low Power Wi-Fi Module  
Mode: TX 2412MHz(802.11b)  
Model: MODCC32  
Manufacturer: Power 7 Technology(Dongguan)Co., Ltd

Polarization: Vertical  
Power Source: DC 3.3V  
Date: 2016/11/05  
Time: 17:18:40  
Engineer Signature:  
Distance: 3m

Note: Report NO.:ATE20162251

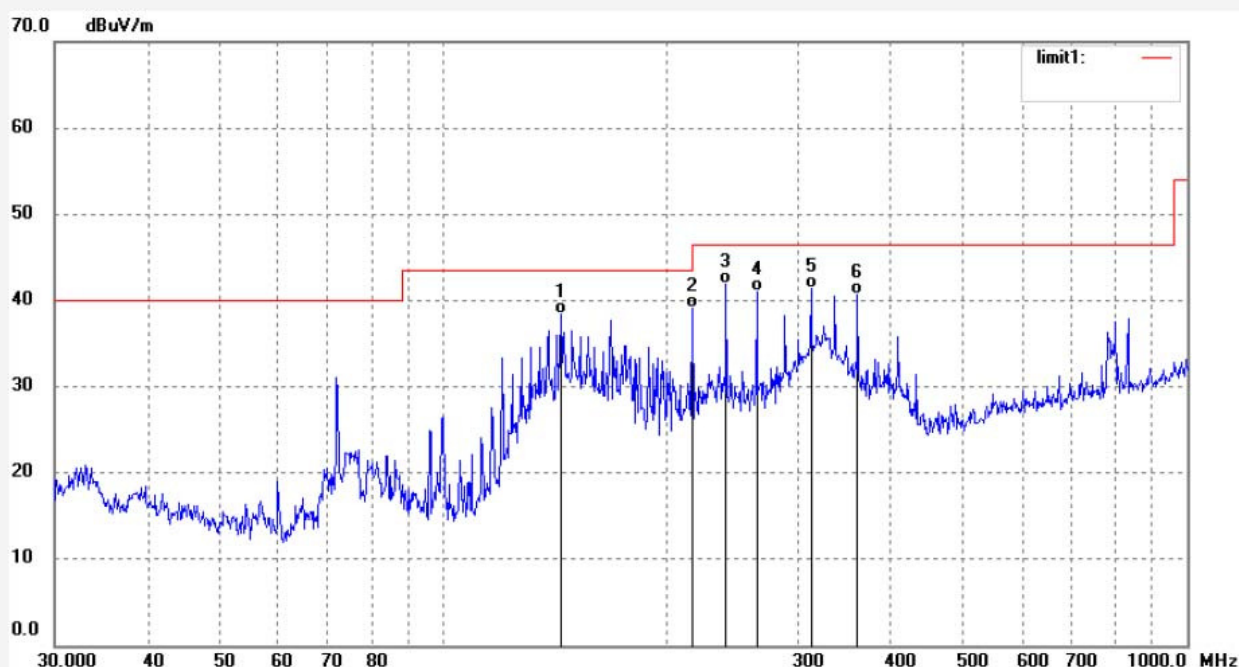


| No. | Freq. (MHz) | Reading (dBuV/m) | Factor (dB) | Result (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Detector | Height (cm) | Degree (deg.) | Remark |
|-----|-------------|------------------|-------------|-----------------|----------------|-------------|----------|-------------|---------------|--------|
| 1   | 71.8320     | 42.00            | -13.93      | 28.07           | 40.00          | -11.93      | QP       |             |               |        |
| 2   | 216.0240    | 43.10            | -9.66       | 33.44           | 46.40          | -12.96      | QP       |             |               |        |
| 3   | 239.9874    | 45.78            | -9.33       | 36.45           | 46.40          | -9.95       | QP       |             |               |        |
| 4   | 263.8190    | 43.62            | -7.31       | 36.31           | 46.40          | -10.09      | QP       |             |               |        |
| 5   | 390.7226    | 43.62            | -3.93       | 39.69           | 46.40          | -6.71       | QP       |             |               |        |
| 6   | 801.7863    | 39.59            | 1.88        | 41.47           | 46.40          | -4.93       | QP       |             |               |        |

Job No.: DING #845  
Standard: FCC Class B 3M Radiated  
Test item: Radiation Test  
Temp.( C)/Hum.(%) 23 C / 48 %  
EUT: MivaTek Low Power Wi-Fi Module  
Mode: TX 2437MHz(802.11b)  
Model: MODCC32  
Manufacturer: Power 7 Technology(Dongguan)Co., Ltd

Polarization: Horizontal  
Power Source: DC 3.3V  
Date: 2016/11/05  
Time: 17:22:32  
Engineer Signature:  
Distance: 3m

Note: Report NO.:ATE20162251



| No. | Freq. (MHz) | Reading (dBuV/m) | Factor (dB) | Result (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Detector | Height (cm) | Degree (deg.) | Remark |
|-----|-------------|------------------|-------------|-----------------|----------------|-------------|----------|-------------|---------------|--------|
| 1   | 143.8293    | 50.46            | -12.11      | 38.35           | 43.50          | -5.15       | QP       |             |               |        |
| 2   | 216.0240    | 48.79            | -9.66       | 39.13           | 46.40          | -7.27       | QP       |             |               |        |
| 3   | 239.9874    | 51.29            | -9.32       | 41.97           | 46.40          | -4.43       | QP       |             |               |        |
| 4   | 263.8190    | 48.29            | -7.31       | 40.98           | 46.40          | -5.42       | QP       |             |               |        |
| 5   | 312.1792    | 48.10            | -6.66       | 41.44           | 46.40          | -4.96       | QP       |             |               |        |
| 6   | 360.4476    | 45.31            | -4.54       | 40.77           | 46.40          | -5.63       | QP       |             |               |        |



Job No.: DING #846

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

Temp.( C)/Hum.(%) 23 C / 48 %

EUT: MivaTek Low Power Wi-Fi Module

Mode: TX 2437MHz(802.11b)

Model: MODCC32

Manufacturer: Power 7 Technology(Dongguan)Co., Ltd

Polarization: Vertical

Power Source: DC 3.3V

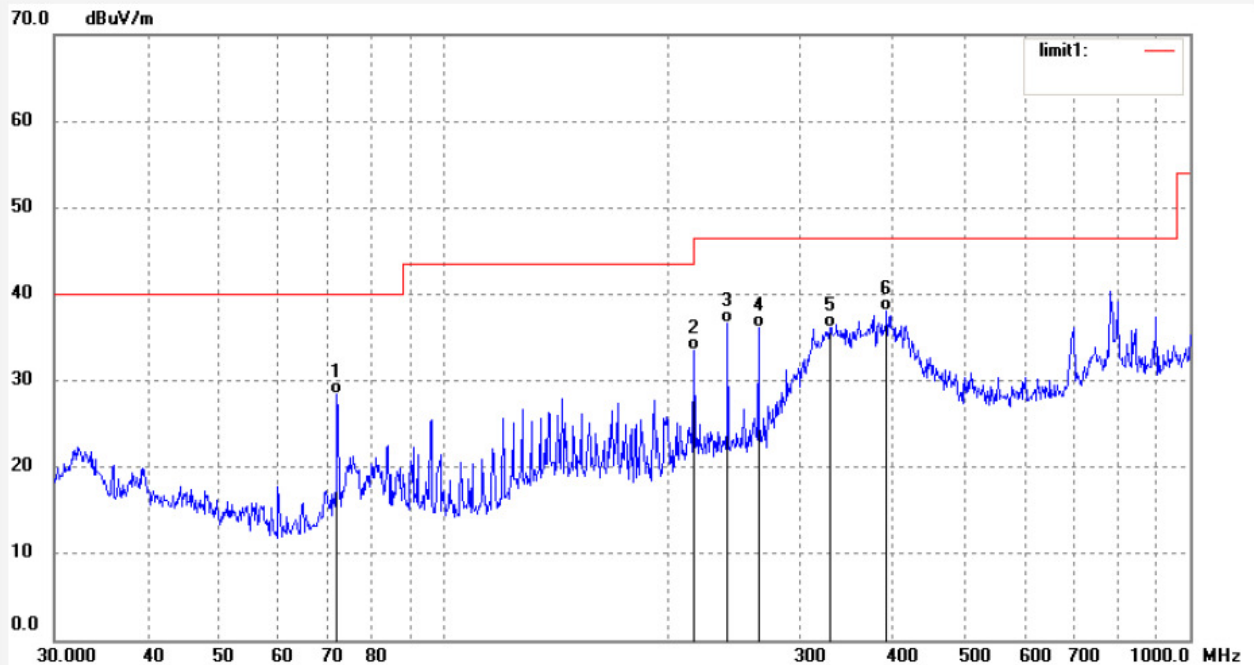
Date: 2016/11/05

Time: 17:24:06

Engineer Signature:

Distance: 3m

Note: Report NO.:ATE20162251

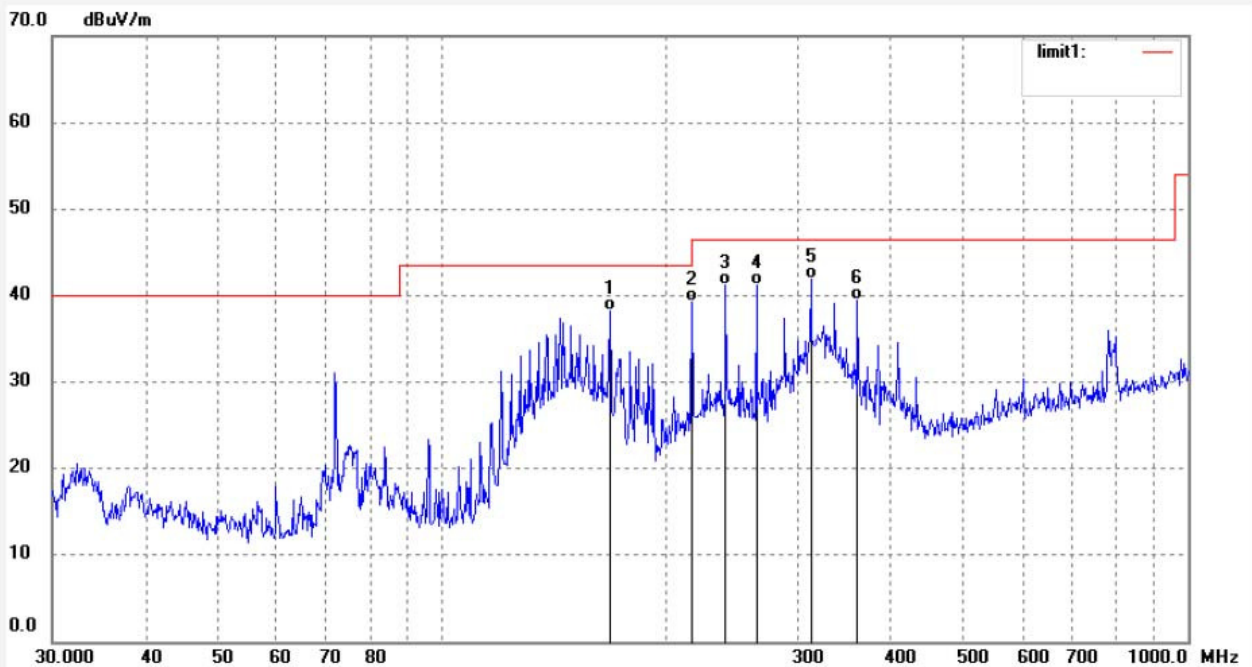


| No. | Freq. (MHz) | Reading (dBuV/m) | Factor (dB) | Result (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Detector | Height (cm) | Degree (deg.) | Remark |
|-----|-------------|------------------|-------------|-----------------|----------------|-------------|----------|-------------|---------------|--------|
| 1   | 71.8320     | 42.32            | -13.93      | 28.39           | 40.00          | -11.61      | QP       |             |               |        |
| 2   | 216.0240    | 43.11            | -9.66       | 33.45           | 46.40          | -12.95      | QP       |             |               |        |
| 3   | 239.9874    | 45.93            | -9.33       | 36.60           | 46.40          | -9.80       | QP       |             |               |        |
| 4   | 263.8190    | 43.44            | -7.31       | 36.13           | 46.40          | -10.27      | QP       |             |               |        |
| 5   | 329.0390    | 42.27            | -6.07       | 36.20           | 46.40          | -10.20      | QP       |             |               |        |
| 6   | 392.0951    | 41.88            | -3.87       | 38.01           | 46.40          | -8.39       | QP       |             |               |        |

Job No.: DING #848  
Standard: FCC Class B 3M Radiated  
Test item: Radiation Test  
Temp.( C)/Hum.(%) 23 C / 48 %  
EUT: MivaTek Low Power Wi-Fi Module  
Mode: TX 2462MHz(802.11b)  
Model: MODCC32  
Manufacturer: Power 7 Technology(Dongguan)Co., Ltd

Polarization: Horizontal  
Power Source: DC 3.3V  
Date: 2016/11/05  
Time: 17:26:00  
Engineer Signature:  
Distance: 3m

Note: Report NO.:ATE20162251

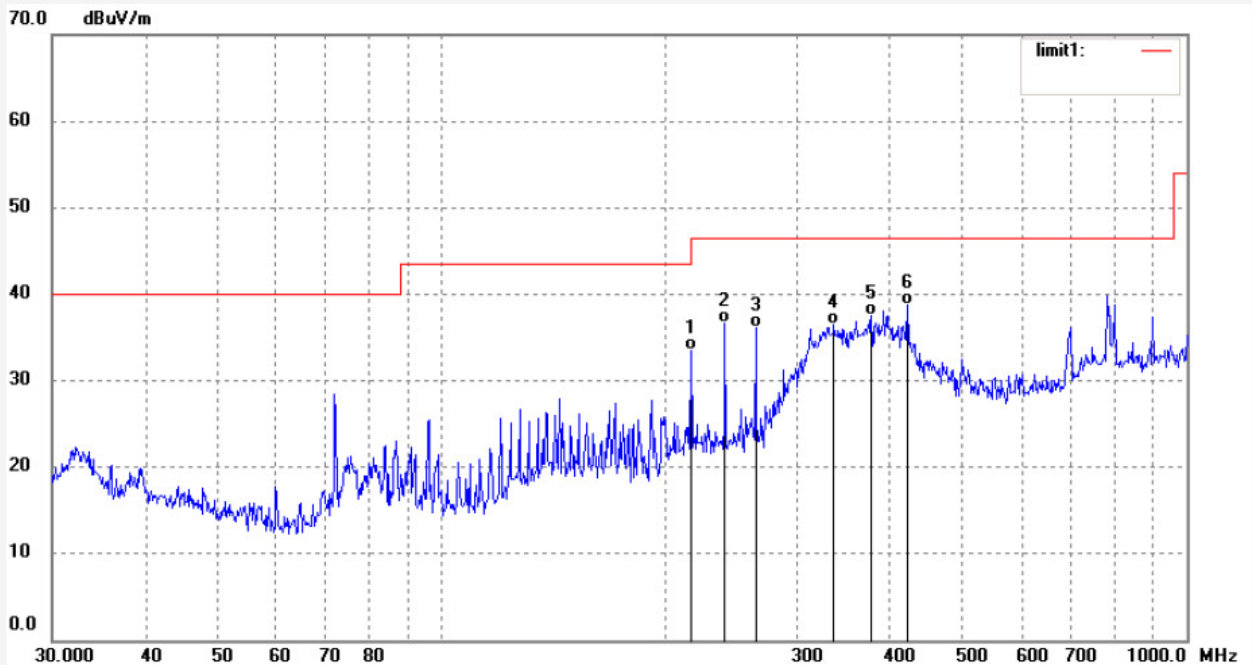


| No. | Freq. (MHz) | Reading (dBuV/m) | Factor (dB) | Result (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Detector | Height (cm) | Degree (deg.) | Remark |
|-----|-------------|------------------|-------------|-----------------|----------------|-------------|----------|-------------|---------------|--------|
| 1   | 167.8243    | 49.51            | -11.22      | 38.29           | 43.50          | -5.21       | QP       |             |               |        |
| 2   | 216.0240    | 49.00            | -9.66       | 39.34           | 46.40          | -7.06       | QP       |             |               |        |
| 3   | 239.9874    | 50.55            | -9.33       | 41.22           | 46.40          | -5.18       | QP       |             |               |        |
| 4   | 263.8190    | 48.53            | -7.31       | 41.22           | 46.40          | -5.18       | QP       |             |               |        |
| 5   | 312.1794    | 48.58            | -6.66       | 41.92           | 46.40          | -4.48       | QP       |             |               |        |
| 6   | 360.4476    | 43.93            | -4.54       | 39.39           | 46.40          | -7.01       | QP       |             |               |        |

Job No.: DING #847  
Standard: FCC Class B 3M Radiated  
Test item: Radiation Test  
Temp.( C)/Hum.(%) 23 C / 48 %  
EUT: MivaTek Low Power Wi-Fi Module  
Mode: TX 2462MHz(802.11b)  
Model: MODCC32  
Manufacturer: Power 7 Technology(Dongguan)Co., Ltd

Polarization: Vertical  
Power Source: DC 3.3V  
Date: 2016/11/05  
Time: 17:24:37  
Engineer Signature:  
Distance: 3m

Note: Report NO.:ATE20162251



| No. | Freq. (MHz) | Reading (dBuV/m) | Factor (dB) | Result (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Detector | Height (cm) | Degree (deg.) | Remark |
|-----|-------------|------------------|-------------|-----------------|----------------|-------------|----------|-------------|---------------|--------|
| 1   | 216.0240    | 43.18            | -9.66       | 33.52           | 46.40          | -12.88      | QP       |             |               |        |
| 2   | 239.9874    | 45.93            | -9.33       | 36.60           | 46.40          | -9.80       | QP       |             |               |        |
| 3   | 263.8190    | 43.44            | -7.31       | 36.13           | 46.40          | -10.27      | QP       |             |               |        |
| 4   | 336.0352    | 42.41            | -5.91       | 36.50           | 46.40          | -9.90       | QP       |             |               |        |
| 5   | 377.2591    | 41.76            | -4.29       | 37.47           | 46.40          | -8.93       | QP       |             |               |        |
| 6   | 422.0577    | 41.40            | -2.70       | 38.70           | 46.40          | -7.70       | QP       |             |               |        |



## Above 1G



### ACCURATE TECHNOLOGY CO., LTD.

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Science & Industry Park,Nanshan Shenzhen,P.R.China

Site: 1# Chamber  
Tel:+86-0755-26503290  
Fax:+86-0755-26503396

Job No.: STAR2016 #1877

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

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

EUT: Media box

Mode: TX Channel 1 (802.11b)

Model: MODCC32

Manufacturer: Power 7 Technology(Dongguan)Co., Ltd

Polarization: Horizontal

Power Source: AC 120V/60Hz

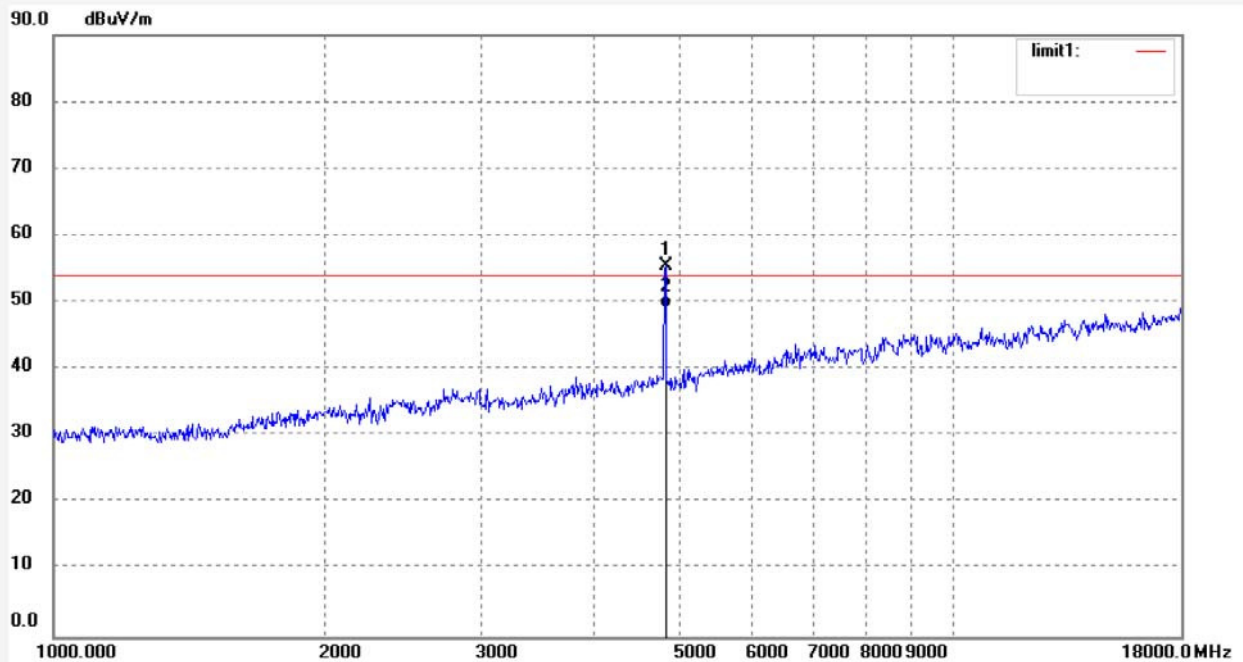
Date: 16/06/15/

Time: 16/15/26

Engineer Signature: star

Distance: 3m

Note: Report No.:ATE20161167



| No. | Freq. (MHz) | Reading (dBuV/m) | Factor (dB) | Result (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Detector | Height (cm) | Degree (deg.) | Remark |
|-----|-------------|------------------|-------------|-----------------|----------------|-------------|----------|-------------|---------------|--------|
| 1   | 4824.328    | 57.58            | -2.22       | 55.36           | 74.00          | -18.64      | peak     |             |               |        |
| 2   | 4824.328    | 51.29            | -2.22       | 49.07           | 54.00          | -4.93       | AVG      |             |               |        |



## ACCURATE TECHNOLOGY CO., LTD.

F1,Bldg,A,Changyuan New Material Port Keyuan Rd,  
Science & Industry Park,Nanshan Shenzhen,P.R.China

Site: 1# Chamber  
Tel:+86-0755-26503290  
Fax:+86-0755-26503396

Job No.: STAR2016 #1876

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

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

EUT: Media box

Mode: TX Channel 1 (802.11b)

Model: MODCC32

Manufacturer: Power 7 Technology(Dongguan)Co., Ltd

Polarization: Vertical

Power Source: DC 3.3V

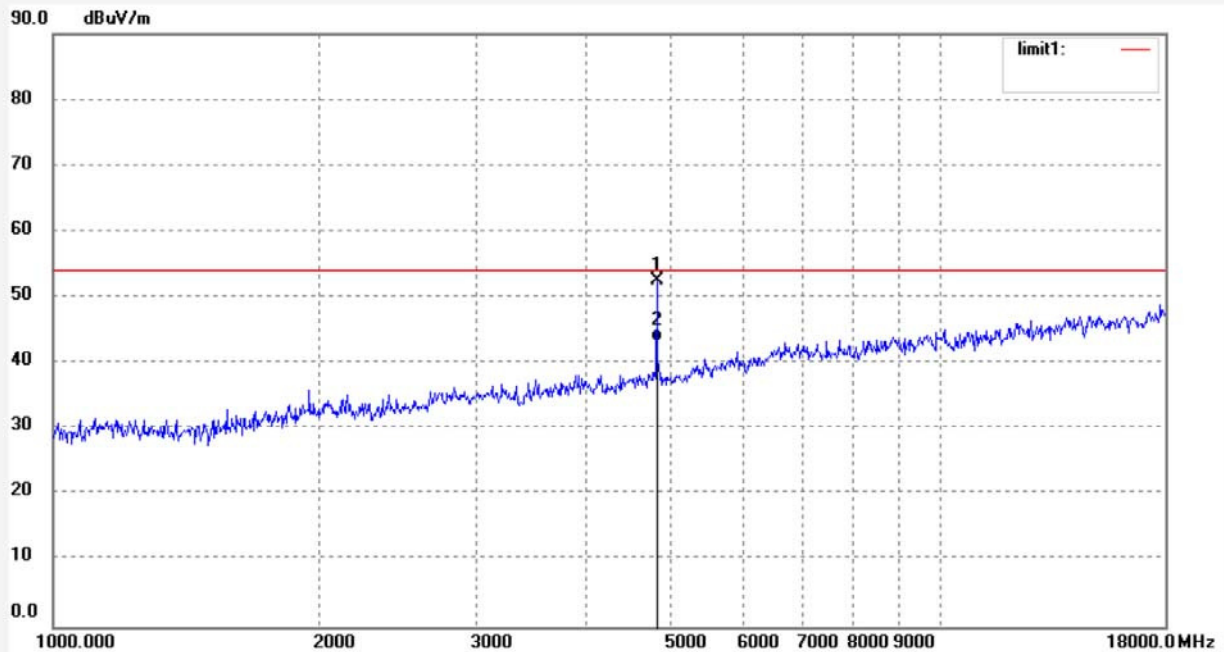
Date: 2016/11/05

Time: 16/14/50

Engineer Signature: star

Distance: 3m

Note: Report NO.:ATE20162251



| No. | Freq. (MHz) | Reading (dBuV/m) | Factor (dB) | Result (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Detector | Height (cm) | Degree (deg.) | Remark |
|-----|-------------|------------------|-------------|-----------------|----------------|-------------|----------|-------------|---------------|--------|
| 1   | 4824.328    | 54.68            | -2.22       | 52.46           | 74.00          | -21.54      | peak     |             |               |        |
| 2   | 4824.328    | 45.53            | -2.22       | 43.31           | 54.00          | -10.69      | AVG      |             |               |        |



Job No.: STAR2016 #1878

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

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

EUT: Media box

Mode: TX Channel 6 (802.11b)

Model: MODCC32

Manufacturer: Power 7 Technology(Dongguan)Co., Ltd

Polarization: Horizontal

Power Source: DC 3.3V

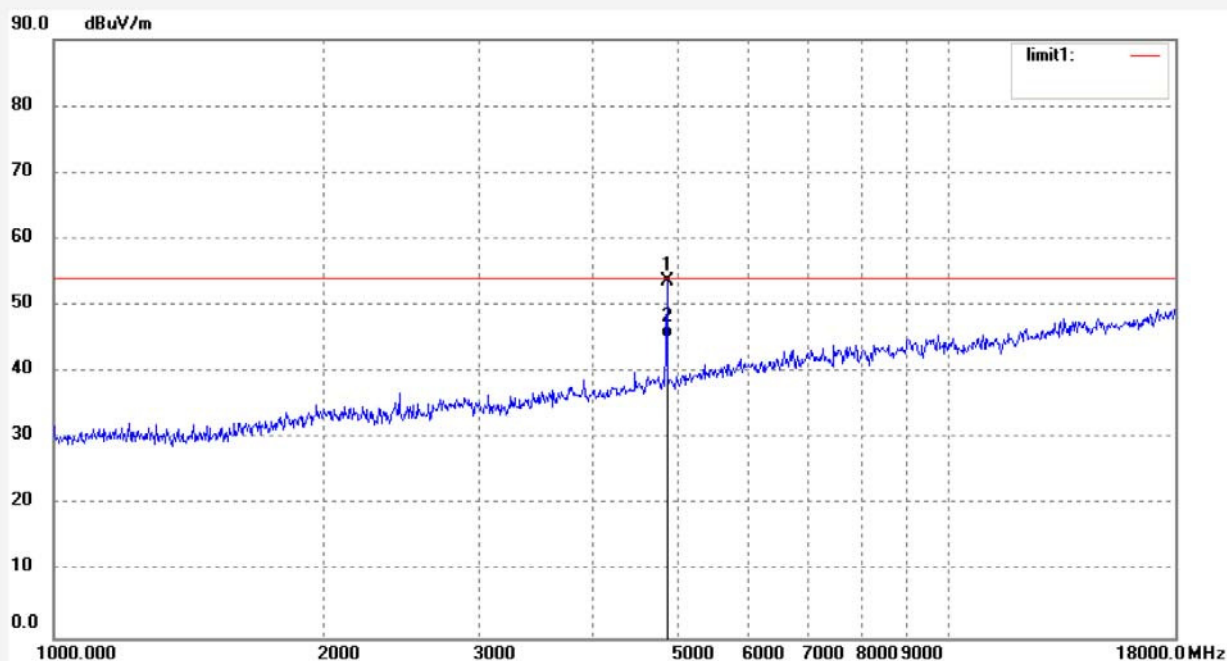
Date: 2016/11/05

Time: 16/16/07

Engineer Signature: star

Distance: 3m

Note: Report NO.:ATE20162251



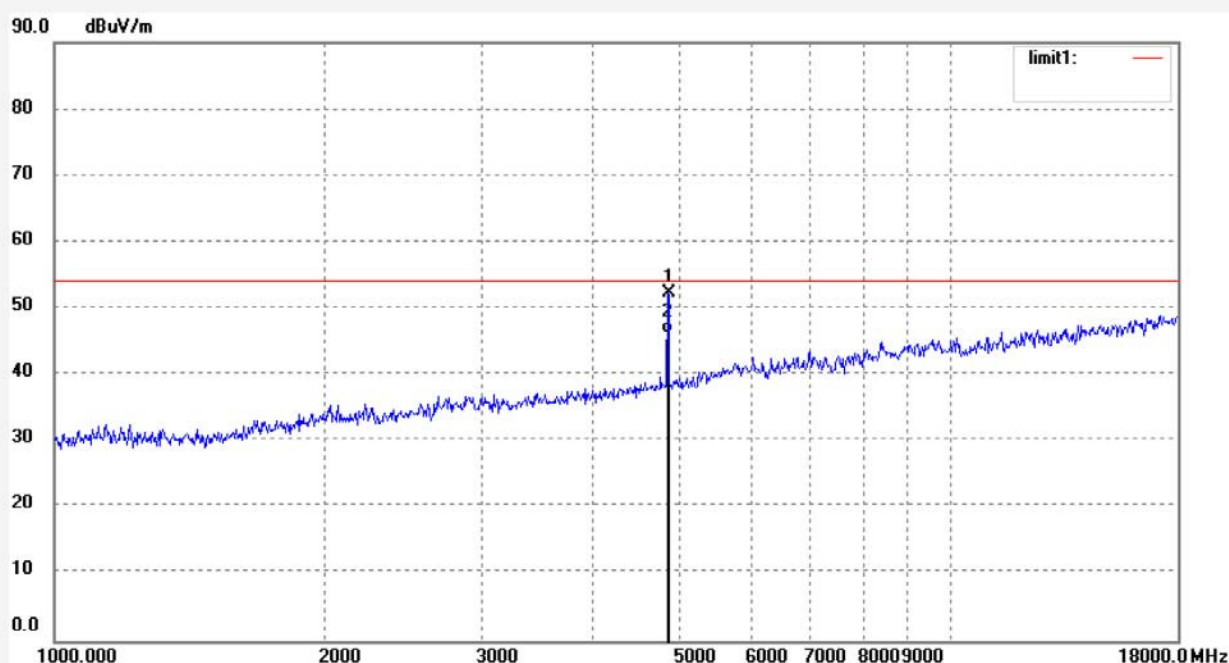
| No. | Freq. (MHz) | Reading (dBuV/m) | Factor (dB) | Result (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Detector | Height (cm) | Degree (deg.) | Remark |
|-----|-------------|------------------|-------------|-----------------|----------------|-------------|----------|-------------|---------------|--------|
| 1   | 4874.557    | 55.67            | -2.05       | 53.62           | 74.00          | -20.38      | peak     |             |               |        |
| 2   | 4874.557    | 47.23            | -2.05       | 45.18           | 54.00          | -8.82       | AVG      |             |               |        |

Job No.: STAR2016 #1879  
Standard: FCC Class B 3M Radiated  
Test item: Radiation Test  
Temp.( C)/Hum.(%) 25 C / 55 %  
EUT: Media box  
Mode: TX Channel 6 (802.11b)  
Model: MODCC32

Polarization: Vertical  
Power Source: DC 3.3V  
Date: 2016/11/05  
Time: 16/16/54  
Engineer Signature: star  
Distance: 3m

Manufacturer: Power 7 Technology(Dongguan)Co., Ltd

Note: Report NO.:ATE20162251



| No. | Freq.<br>(MHz) | Reading<br>(dBuV/m) | Factor<br>(dB) | Result<br>(dBuV/m) | Limit<br>(dBuV/m) | Margin<br>(dB) | Detector | Height<br>(cm) | Degree<br>(deg.) | Remark |
|-----|----------------|---------------------|----------------|--------------------|-------------------|----------------|----------|----------------|------------------|--------|
| 1   | 4874.438       | 54.28               | -2.05          | 52.23              | 74.00             | -21.77         | peak     |                |                  |        |
| 2   | 4874.438       | 48.36               | -2.05          | 46.31              | 54.00             | -7.69          | AVG      |                |                  |        |

Job No.: STAR2016 #1881

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

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

EUT: Media box

Mode: TX Channel 11 (802.11b)

Model: MODCC32

Manufacturer: Power 7 Technology(Dongguan)Co., Ltd

Polarization: Horizontal

Power Source: DC 3.3V

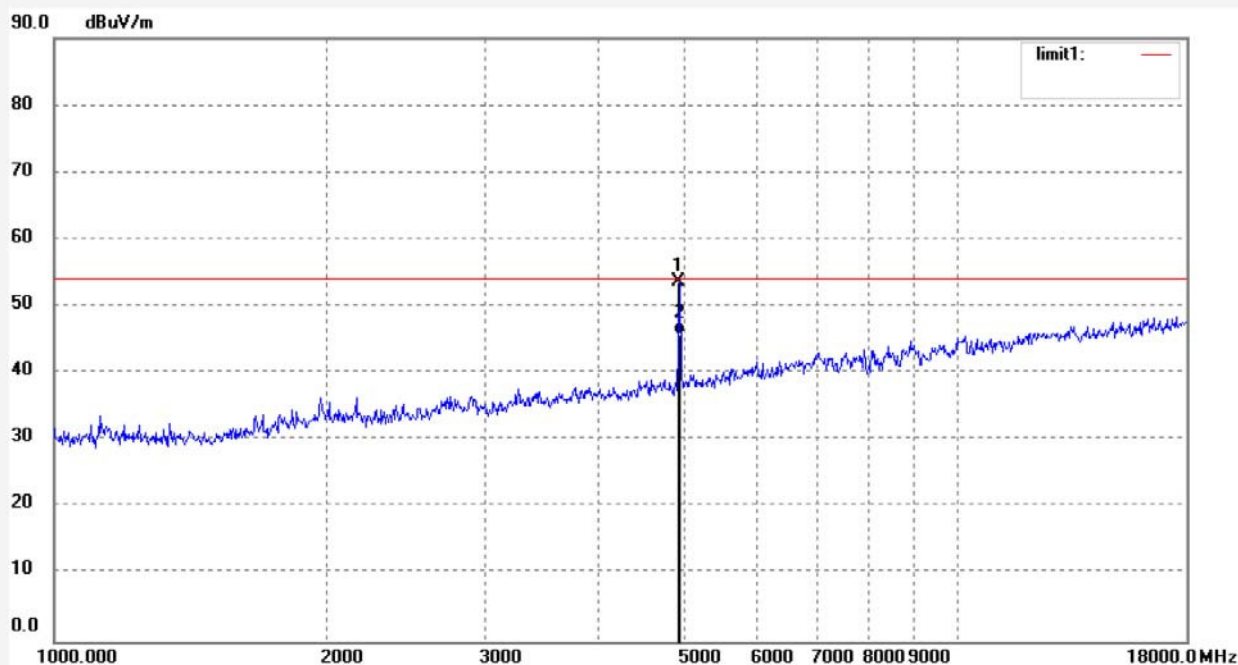
Date: 2016/11/05

Time: 16/18/14

Engineer Signature: star

Distance: 3m

Note: Report NO.:ATE20162251



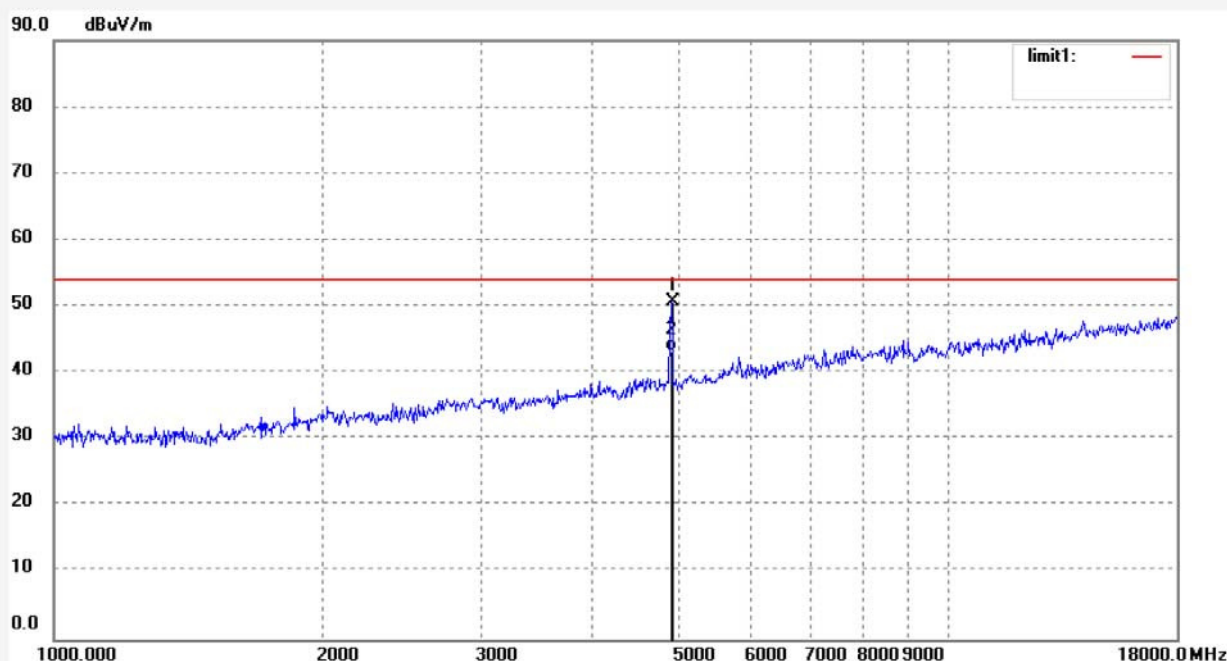
| No. | Freq.<br>(MHz) | Reading<br>(dBuV/m) | Factor<br>(dB) | Result<br>(dBuV/m) | Limit<br>(dBuV/m) | Margin<br>(dB) | Detector | Height<br>(cm) | Degree<br>(deg.) | Remark |
|-----|----------------|---------------------|----------------|--------------------|-------------------|----------------|----------|----------------|------------------|--------|
| 1   | 4924.137       | 55.57               | -1.89          | 53.68              | 74.00             | -20.32         | peak     |                |                  |        |
| 2   | 4924.137       | 47.73               | -1.89          | 45.84              | 54.00             | -8.16          | AVG      |                |                  |        |



Job No.: STAR2016 #1880  
Standard: FCC Class B 3M Radiated  
Test item: Radiation Test  
Temp.( C)/Hum.(%) 25 C / 55 %  
EUT: Media box  
Mode: TX Channel 11 (802.11b)  
Model: MODCC32  
Manufacturer: Power 7 Technology(Dongguan)Co., Ltd

Polarization: Vertical  
Power Source: DC 3.3V  
Date: 2016/11/05  
Time: 16/17/33  
Engineer Signature: star  
Distance: 3m

Note: Report NO.:ATE20162251



| No. | Freq. (MHz) | Reading (dBuV/m) | Factor (dB) | Result (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Detector | Height (cm) | Degree (deg.) | Remark |
|-----|-------------|------------------|-------------|-----------------|----------------|-------------|----------|-------------|---------------|--------|
| 1   | 4924.160    | 52.64            | -1.89       | 50.75           | 74.00          | -23.25      | peak     |             |               |        |
| 2   | 4924.160    | 45.23            | -1.89       | 43.34           | 54.00          | -10.66      | AVG      |             |               |        |



Job No.: STAR2016 #1882

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

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

EUT: Media box

Mode: TX Channel 1 (802.11g)

Model: MODCC32

Manufacturer: Power 7 Technology(Dongguan)Co., Ltd

Polarization: Horizontal

Power Source: DC 3.3V

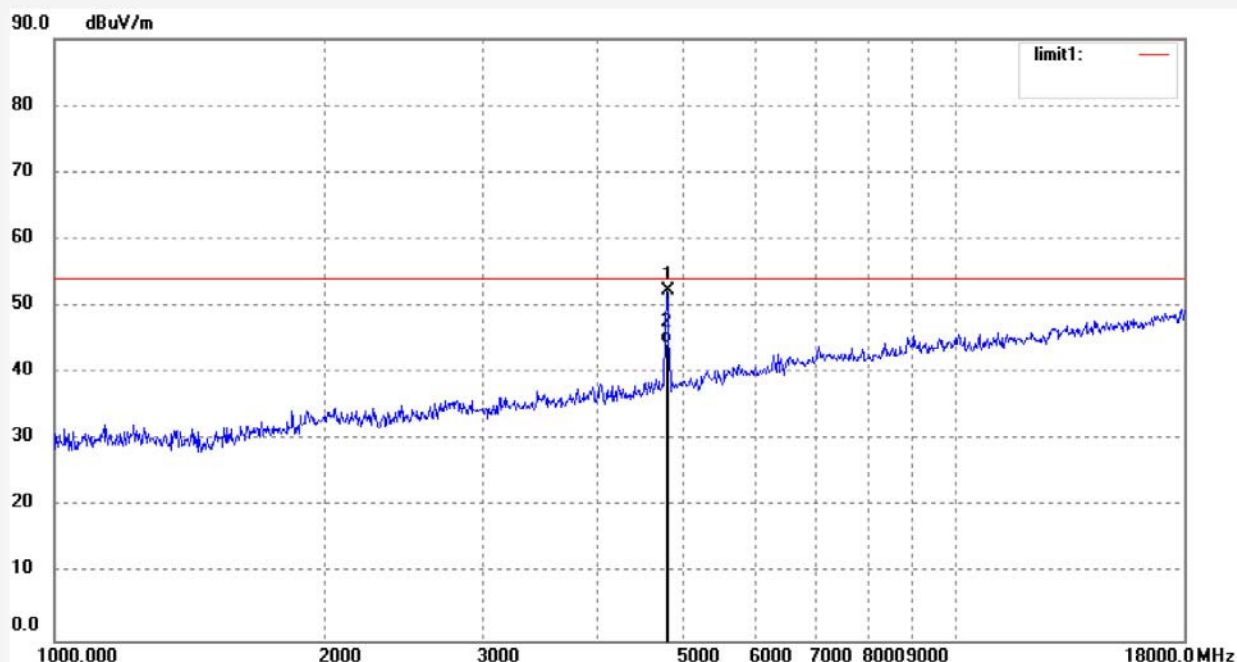
Date: 2016/11/05

Time: 16/25/43

Engineer Signature: star

Distance: 3m

Note: Report NO.:ATE20162251

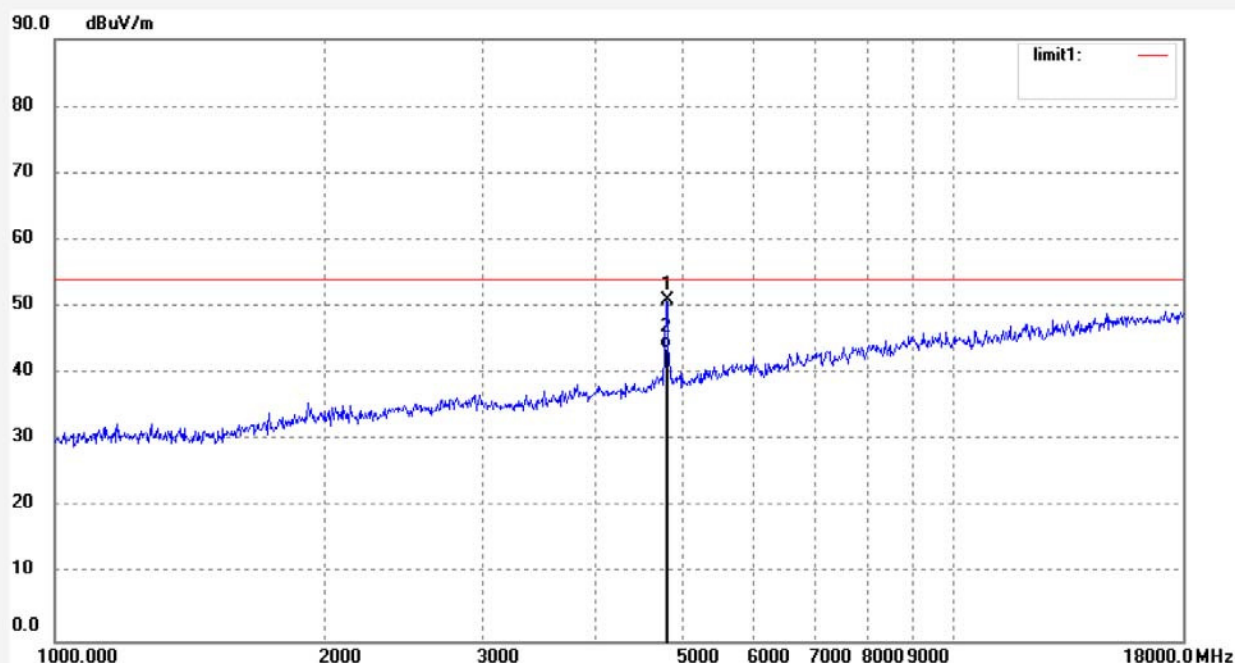


| No. | Freq.<br>(MHz) | Reading<br>(dBuV/m) | Factor<br>(dB) | Result<br>(dBuV/m) | Limit<br>(dBuV/m) | Margin<br>(dB) | Detector | Height<br>(cm) | Degree<br>(deg.) | Remark |
|-----|----------------|---------------------|----------------|--------------------|-------------------|----------------|----------|----------------|------------------|--------|
| 1   | 4824.000       | 54.59               | -2.22          | 52.37              | 74.00             | -21.63         | peak     |                |                  |        |
| 2   | 4824.000       | 46.63               | -2.22          | 44.41              | 54.00             | -9.59          | AVG      |                |                  |        |

Job No.: STAR2016 #1883  
Standard: FCC Class B 3M Radiated  
Test item: Radiation Test  
Temp.( C)/Hum.(%) 25 C / 55 %  
EUT: Media box  
Mode: TX Channel 1 (802.11g)  
Model: MODCC32  
Manufacturer: Power 7 Technology(Dongguan)Co., Ltd

Polarization: Vertical  
Power Source: DC 3.3V  
Date: 2016/11/05  
Time: 16/26/38  
Engineer Signature: star  
Distance: 3m

Note: Report NO.:ATE20162251



| No. | Freq.<br>(MHz) | Reading<br>(dBuV/m) | Factor<br>(dB) | Result<br>(dBuV/m) | Limit<br>(dBuV/m) | Margin<br>(dB) | Detector | Height<br>(cm) | Degree<br>(deg.) | Remark |
|-----|----------------|---------------------|----------------|--------------------|-------------------|----------------|----------|----------------|------------------|--------|
| 1   | 4824.373       | 53.10               | -2.22          | 50.88              | 74.00             | -23.12         | peak     |                |                  |        |
| 2   | 4824.373       | 45.92               | -2.22          | 43.70              | 54.00             | -10.30         | AVG      |                |                  |        |

Job No.: STAR2016 #1885

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

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

EUT: Media box

Mode: TX Channel 6 (802.11g)

Model: MODCC32

Manufacturer: Power 7 Technology(Dongguan)Co., Ltd

Polarization: Horizontal

Power Source: DC 3.3V

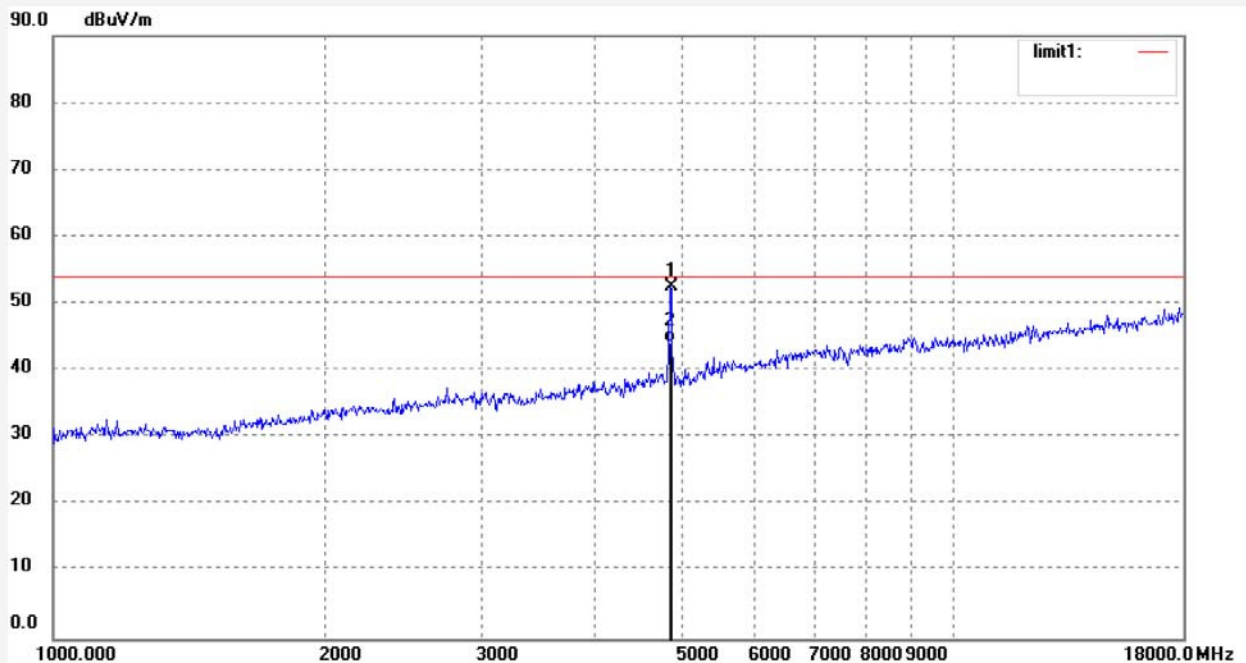
Date: 2016/11/05

Time: 16/28/54

Engineer Signature: star

Distance: 3m

Note: Report NO.:ATE20162251



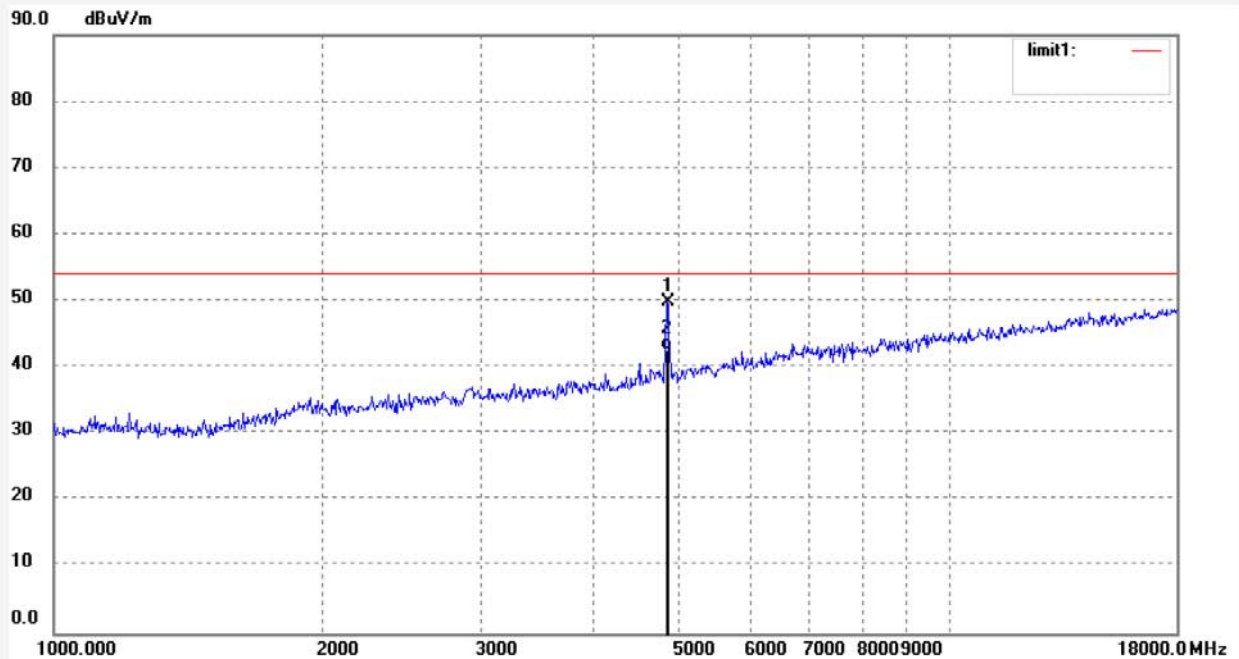
| No. | Freq.<br>(MHz) | Reading<br>(dBuV/m) | Factor<br>(dB) | Result<br>(dBuV/m) | Limit<br>(dBuV/m) | Margin<br>(dB) | Detector | Height<br>(cm) | Degree<br>(deg.) | Remark |
|-----|----------------|---------------------|----------------|--------------------|-------------------|----------------|----------|----------------|------------------|--------|
| 1   | 4874.438       | 54.59               | -2.05          | 52.54              | 74.00             | -21.46         | peak     |                |                  |        |
| 2   | 4874.438       | 46.24               | -2.05          | 44.19              | 54.00             | -9.81          | AVG      |                |                  |        |



Job No.: STAR2016 #1884  
Standard: FCC Class B 3M Radiated  
Test item: Radiation Test  
Temp.( C)/Hum.(%) 25 C / 55 %  
EUT: Media box  
Mode: TX Channel 6 (802.11g)  
Model: MODCC32  
Manufacturer: Power 7 Technology(Dongguan)Co., Ltd

Polarization: Vertical  
Power Source: DC 3.3V  
Date: 2016/11/05  
Time: 16/27/43  
Engineer Signature: star  
Distance: 3m

Note: Report NO.:ATE20162251



| No. | Freq.<br>(MHz) | Reading<br>(dBuV/m) | Factor<br>(dB) | Result<br>(dBuV/m) | Limit<br>(dBuV/m) | Margin<br>(dB) | Detector | Height<br>(cm) | Degree<br>(deg.) | Remark |
|-----|----------------|---------------------|----------------|--------------------|-------------------|----------------|----------|----------------|------------------|--------|
| 1   | 4874.438       | 51.85               | -2.05          | 49.80              | 74.00             | -24.20         | peak     |                |                  |        |
| 2   | 4874.438       | 44.60               | -2.05          | 42.55              | 54.00             | -11.45         | AVG      |                |                  |        |

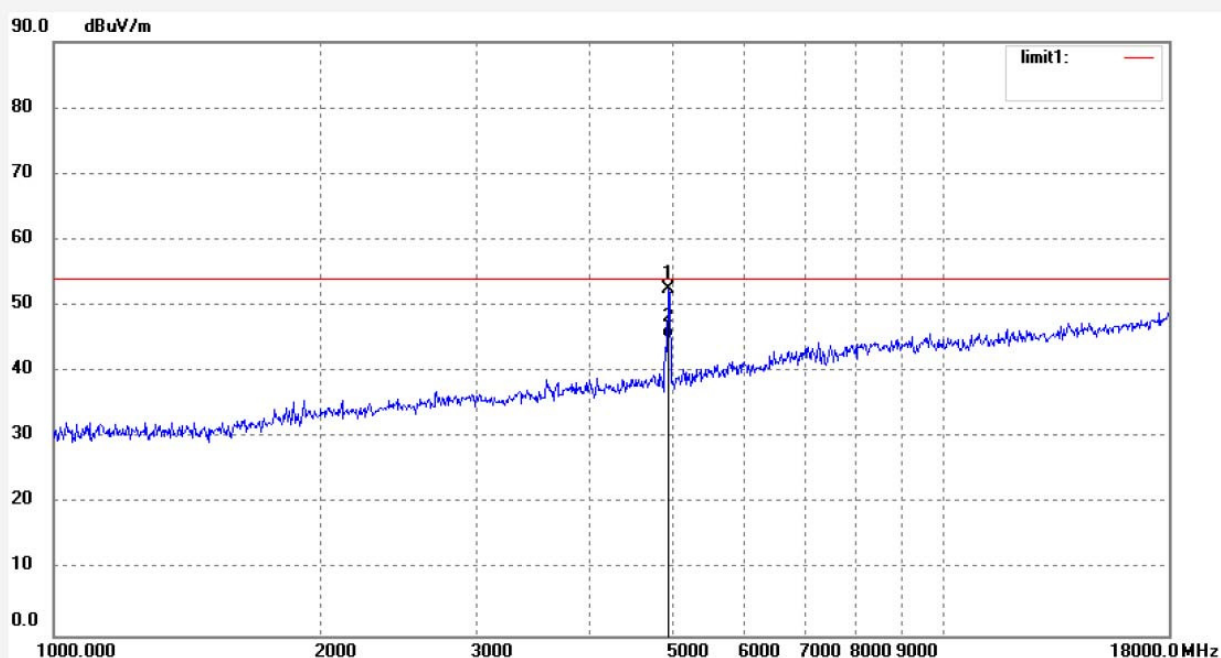


Job No.: STAR2016 #1887  
Standard: FCC Class B 3M Radiated  
Test item: Radiation Test  
Temp.( C)/Hum.(%) 25 C / 55 %  
EUT: Media box  
Mode: TX Channel 11 (802.11g)  
Model: MODCC32

Polarization: Horizontal  
Power Source: DC 3.3V  
Date: 2016/11/05  
Time: 17/13/07  
Engineer Signature: star  
Distance: 3m

Manufacturer: Power 7 Technology(Dongguan)Co., Ltd

Note: Report NO.:ATE20162251



| No. | Freq.<br>(MHz) | Reading<br>(dBuV/m) | Factor<br>(dB) | Result<br>(dBuV/m) | Limit<br>(dBuV/m) | Margin<br>(dB) | Detector | Height<br>(cm) | Degree<br>(deg.) | Remark |
|-----|----------------|---------------------|----------------|--------------------|-------------------|----------------|----------|----------------|------------------|--------|
| 1   | 4924.769       | 54.45               | -1.89          | 52.56              | 74.00             | -21.44         | peak     |                |                  |        |
| 2   | 4924.769       | 47.01               | -1.89          | 45.12              | 54.00             | -8.88          | AVG      |                |                  |        |

Job No.: STAR2016 #1886

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

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

EUT: Media box

Mode: TX Channel 11 (802.11g)

Model: MODCC32

Manufacturer: Power 7 Technology(Dongguan)Co., Ltd

Polarization: Vertical

Power Source: DC 3.3V

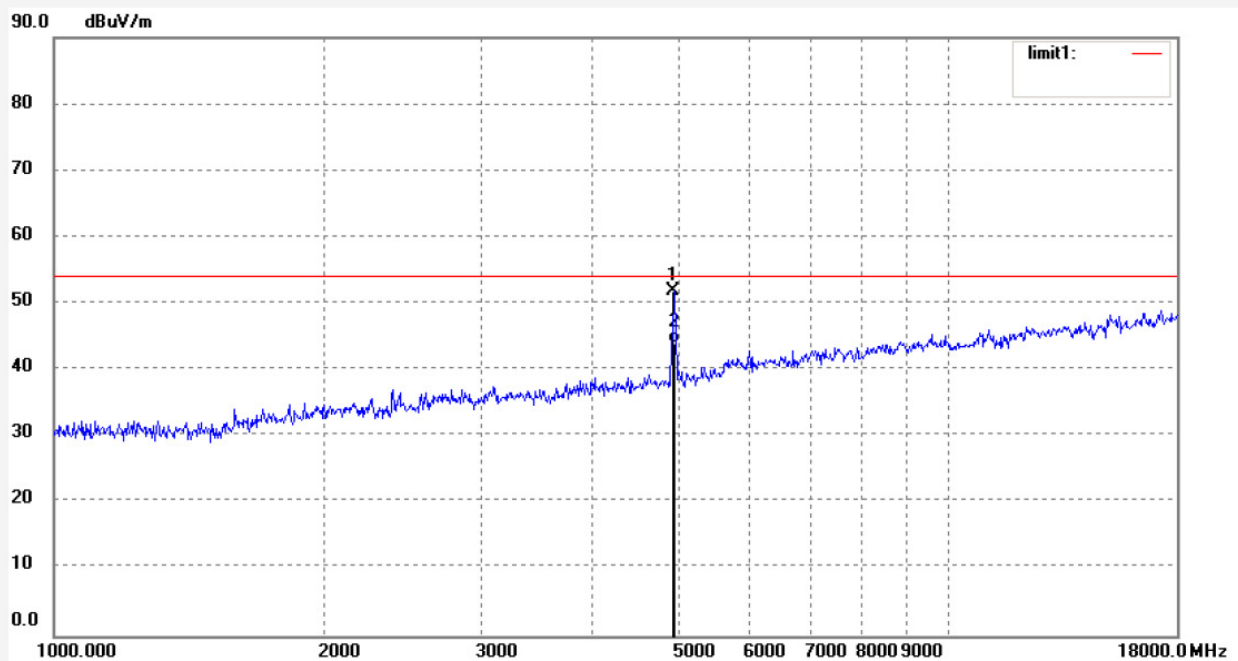
Date: 2016/11/05

Time: 17/12/21

Engineer Signature: star

Distance: 3m

Note: Report NO.:ATE20162251



| No. | Freq. (MHz) | Reading (dBuV/m) | Factor (dB) | Result (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Detector | Height (cm) | Degree (deg.) | Remark |
|-----|-------------|------------------|-------------|-----------------|----------------|-------------|----------|-------------|---------------|--------|
| 1   | 4924.137    | 53.84            | -1.89       | 51.95           | 74.00          | -22.05      | peak     |             |               |        |
| 2   | 4924.137    | 45.77            | -1.89       | 43.88           | 54.00          | -10.12      | AVG      |             |               |        |

Job No.: STAR2016 #1888

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

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

EUT: Media box

Mode: TX Channel 1 (802.11n)20MHz

Model: MODCC32

Manufacturer: Power 7 Technology(Dongguan)Co., Ltd

Polarization: Horizontal

Power Source: DC 3.3V

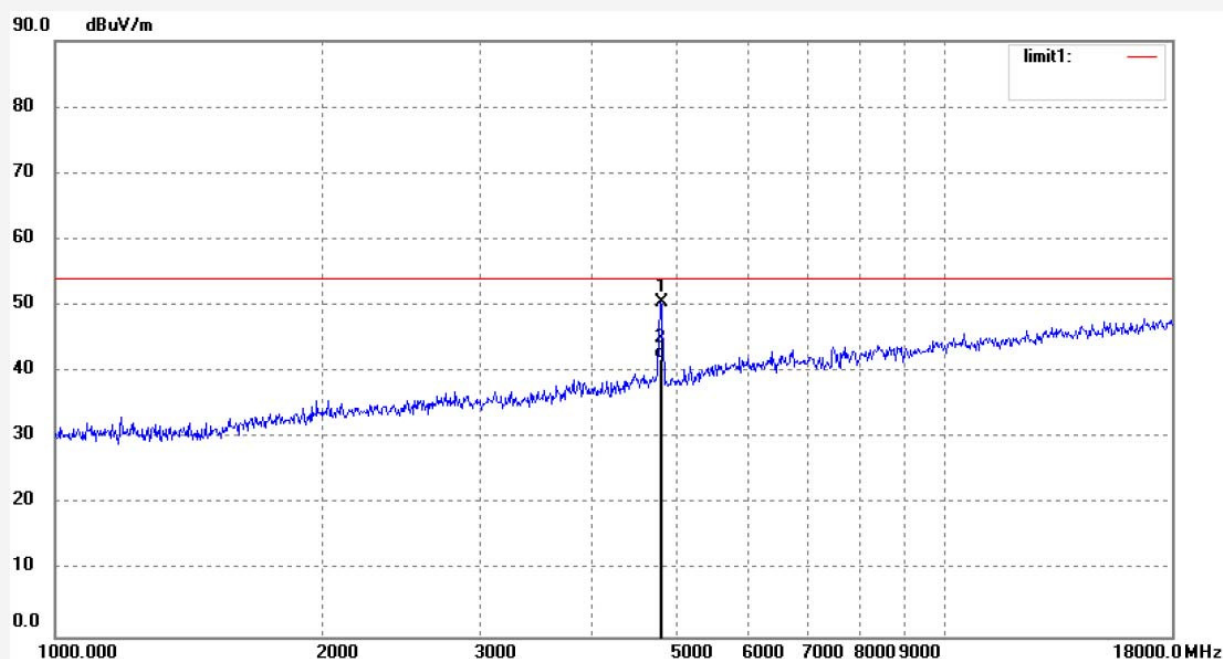
Date: 2016/11/05

Time: 17/13/57

Engineer Signature: star

Distance: 3m

Note: Report NO.:ATE20162251

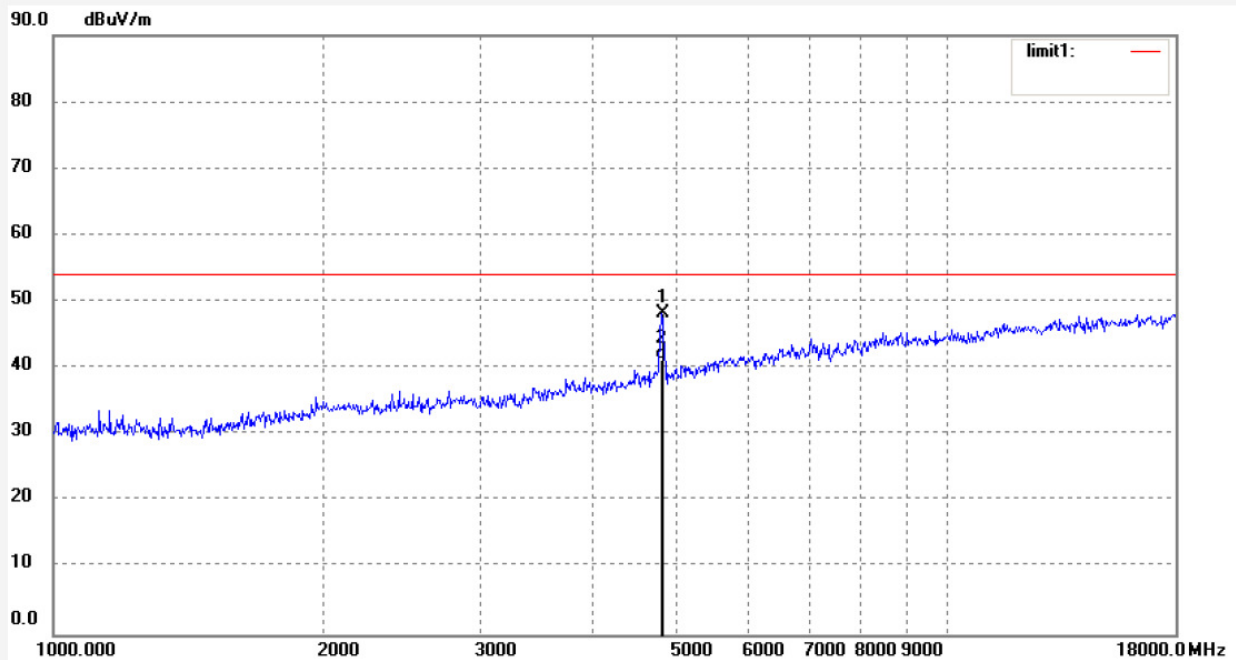


| No. | Freq. (MHz) | Reading (dBuV/m) | Factor (dB) | Result (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Detector | Height (cm) | Degree (deg.) | Remark |
|-----|-------------|------------------|-------------|-----------------|----------------|-------------|----------|-------------|---------------|--------|
| 1   | 4824.373    | 52.74            | -2.22       | 50.52           | 74.00          | -23.48      | peak     |             |               |        |
| 2   | 4824.373    | 44.09            | -2.22       | 41.87           | 54.00          | -12.13      | AVG      |             |               |        |

Job No.: STAR2016 #1889  
Standard: FCC Class B 3M Radiated  
Test item: Radiation Test  
Temp.( C)/Hum.(%) 25 C / 55 %  
EUT: Media box  
Mode: TX Channel 1 (802.11n)20MHz  
Model: MODCC32  
Manufacturer: Power 7 Technology(Dongguan)Co., Ltd

Polarization: Vertical  
Power Source: DC 3.3V  
Date: 2016/11/05  
Time: 17/14/47  
Engineer Signature: star  
Distance: 3m

Note: Report NO.:ATE20162251



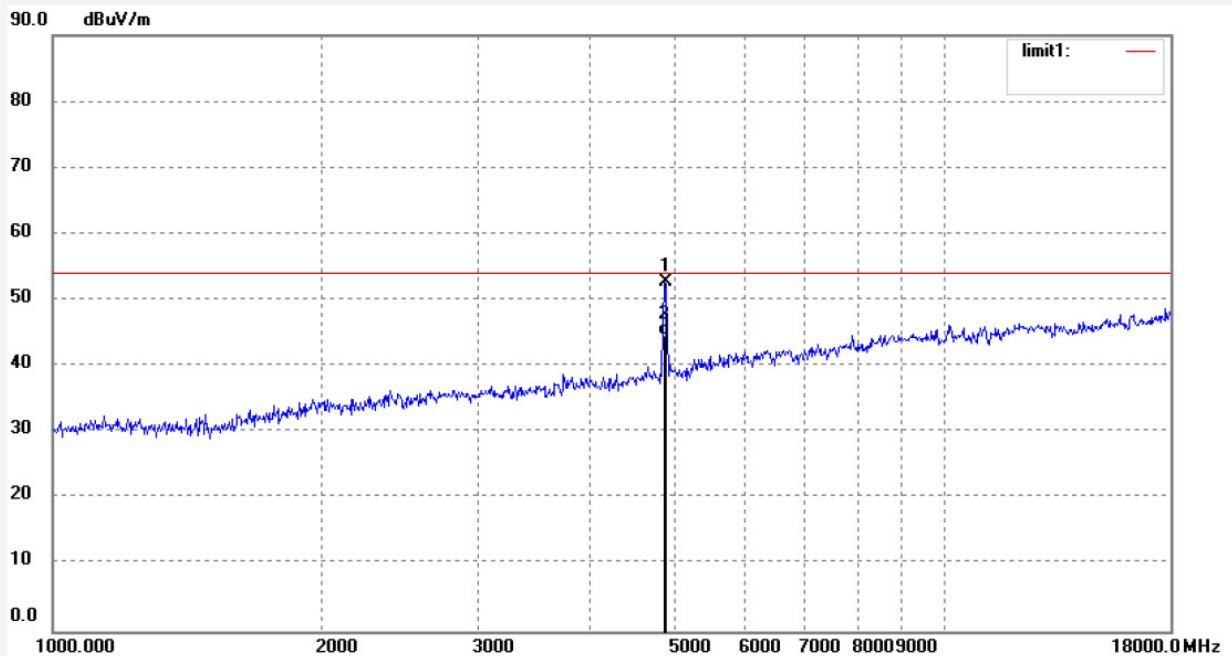
| No. | Freq. (MHz) | Reading (dBuV/m) | Factor (dB) | Result (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Detector | Height (cm) | Degree (deg.) | Remark |
|-----|-------------|------------------|-------------|-----------------|----------------|-------------|----------|-------------|---------------|--------|
| 1   | 4824.373    | 50.42            | -2.22       | 48.20           | 74.00          | -25.80      | peak     |             |               |        |
| 2   | 4824.373    | 43.58            | -2.22       | 41.36           | 54.00          | -12.64      | AVG      |             |               |        |



Job No.: STAR2016 #1891  
Standard: FCC Class B 3M Radiated  
Test item: Radiation Test  
Temp.( C)/Hum.(%) 25 C / 55 %  
EUT: Media box  
Mode: TX Channel 6 (802.11n)20MHz  
Model: MODCC32  
Manufacturer: Power 7 Technology(Dongguan)Co., Ltd

Polarization: Horizontal  
Power Source: DC 3.3V  
Date: 2016/11/05  
Time: 17/16/25  
Engineer Signature: star  
Distance: 3m

Note: Report NO.:ATE20162251

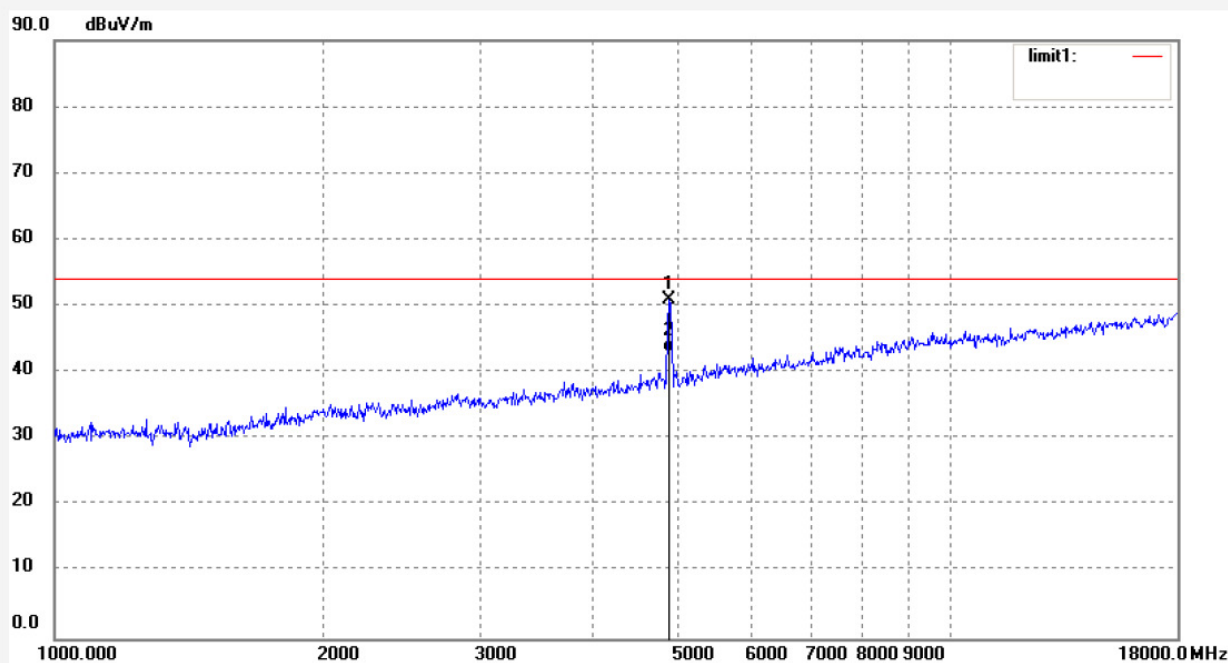


| No. | Freq. (MHz) | Reading (dBuV/m) | Factor (dB) | Result (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Detector | Height (cm) | Degree (deg.) | Remark |
|-----|-------------|------------------|-------------|-----------------|----------------|-------------|----------|-------------|---------------|--------|
| 1   | 4874.557    | 54.83            | -2.05       | 52.78           | 74.00          | -21.22      | peak     |             |               |        |
| 2   | 4874.557    | 46.65            | -2.05       | 44.60           | 54.00          | -9.40       | AVG      |             |               |        |

Job No.: STAR2016 #1890  
Standard: FCC Class B 3M Radiated  
Test item: Radiation Test  
Temp.( C)/Hum.(%) 25 C / 55 %  
EUT: Media box  
Mode: TX Channel 6 (802.11n)20MHz  
Model: MODCC32  
Manufacturer: Power 7 Technology(Dongguan)Co., Ltd

Polarization: Vertical  
Power Source: DC 3.3V  
Date: 2016/11/05  
Time: 17/15/39  
Engineer Signature: star  
Distance: 3m

Note: Report NO.:ATE20162251



| No. | Freq. (MHz) | Reading (dBuV/m) | Factor (dB) | Result (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Detector | Height (cm) | Degree (deg.) | Remark |
|-----|-------------|------------------|-------------|-----------------|----------------|-------------|----------|-------------|---------------|--------|
| 1   | 4874.557    | 53.09            | -2.05       | 51.04           | 74.00          | -22.96      | peak     |             |               |        |
| 2   | 4874.557    | 45.12            | -2.05       | 43.07           | 54.00          | -10.93      | AVG      |             |               |        |

Job No.: STAR2016 #1892

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

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

EUT: Media box

Mode: TX Channel 11 (802.11n)20MHz

Model: MODCC32

Manufacturer: Power 7 Technology(Dongguan)Co., Ltd

Polarization: Horizontal

Power Source: DC 3.3V

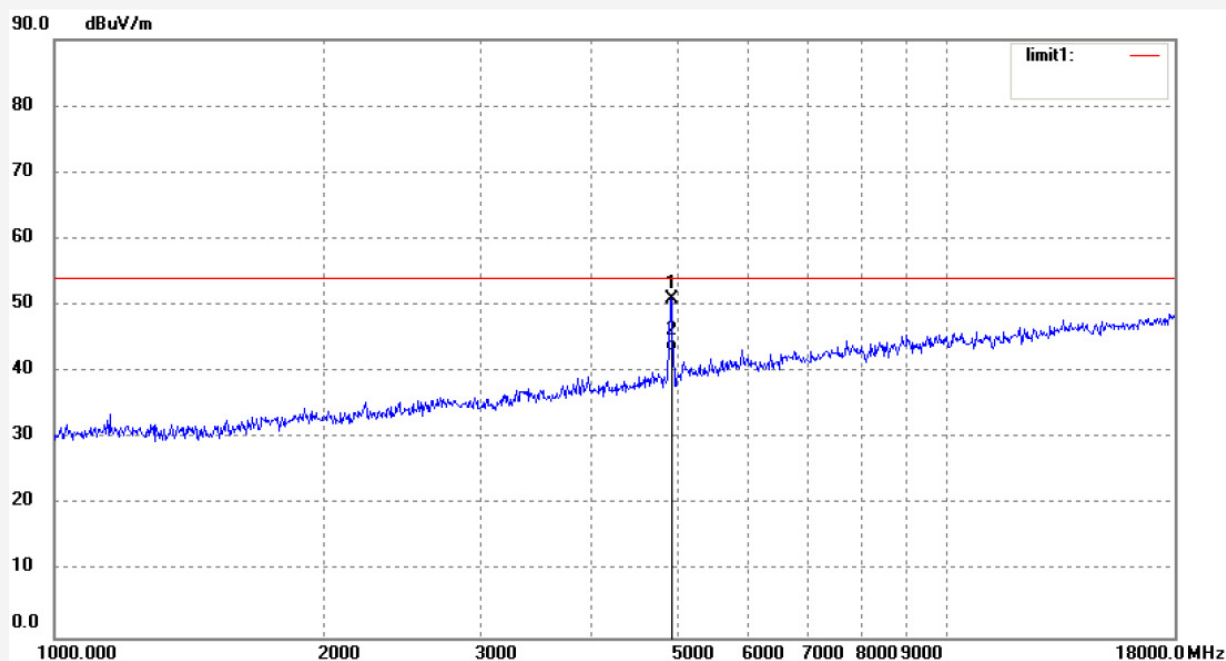
Date: 2016/11/05

Time: 17/17/32

Engineer Signature: star

Distance: 3m

Note: Report NO.:ATE20162251

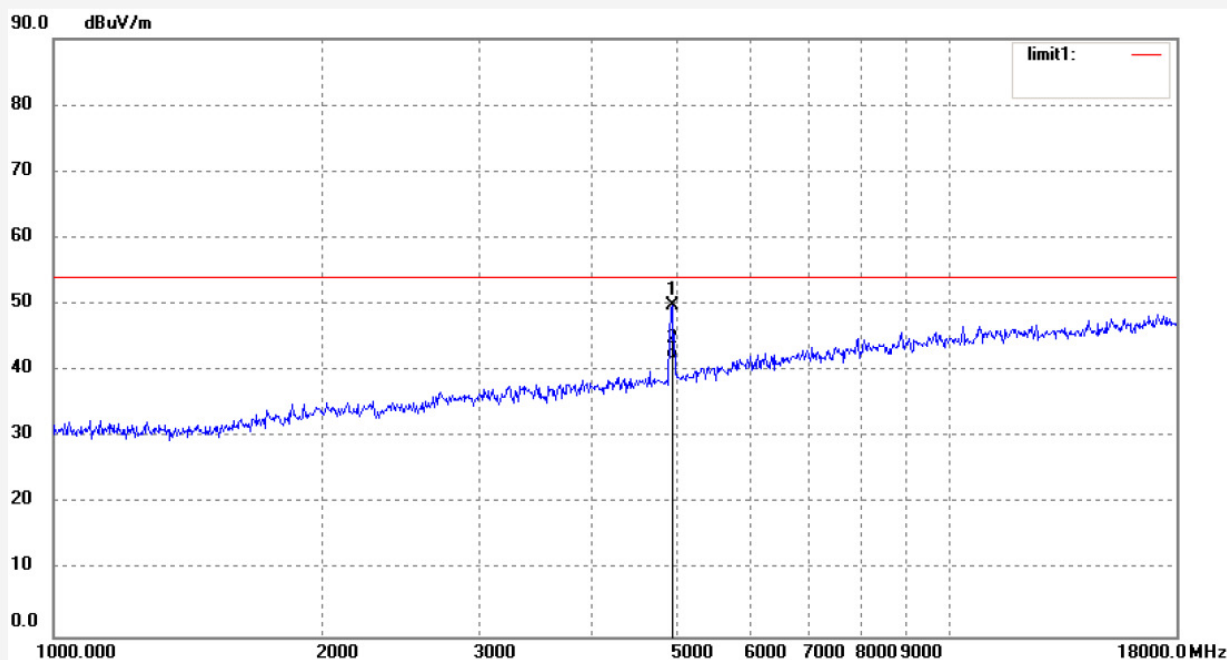


| No. | Freq. (MHz) | Reading (dBuV/m) | Factor (dB) | Result (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Detector | Height (cm) | Degree (deg.) | Remark |
|-----|-------------|------------------|-------------|-----------------|----------------|-------------|----------|-------------|---------------|--------|
| 1   | 4924.444    | 52.90            | -1.89       | 51.01           | 74.00          | -22.99      | peak     |             |               |        |
| 2   | 4924.444    | 45.00            | -1.89       | 43.11           | 54.00          | -10.89      | AVG      |             |               |        |

Job No.: STAR2016 #1893  
Standard: FCC Class B 3M Radiated  
Test item: Radiation Test  
Temp.( C)/Hum.(%) 25 C / 55 %  
EUT: Media box  
Mode: TX Channel 11 (802.11n)20MHz  
Model: MODCC32  
Manufacturer: Power 7 Technology(Dongguan)Co., Ltd

Polarization: Vertical  
Power Source: DC 3.3V  
Date: 2016/11/05  
Time: 17/18/47  
Engineer Signature: star  
Distance: 3m

Note: Report NO.:ATE20162251



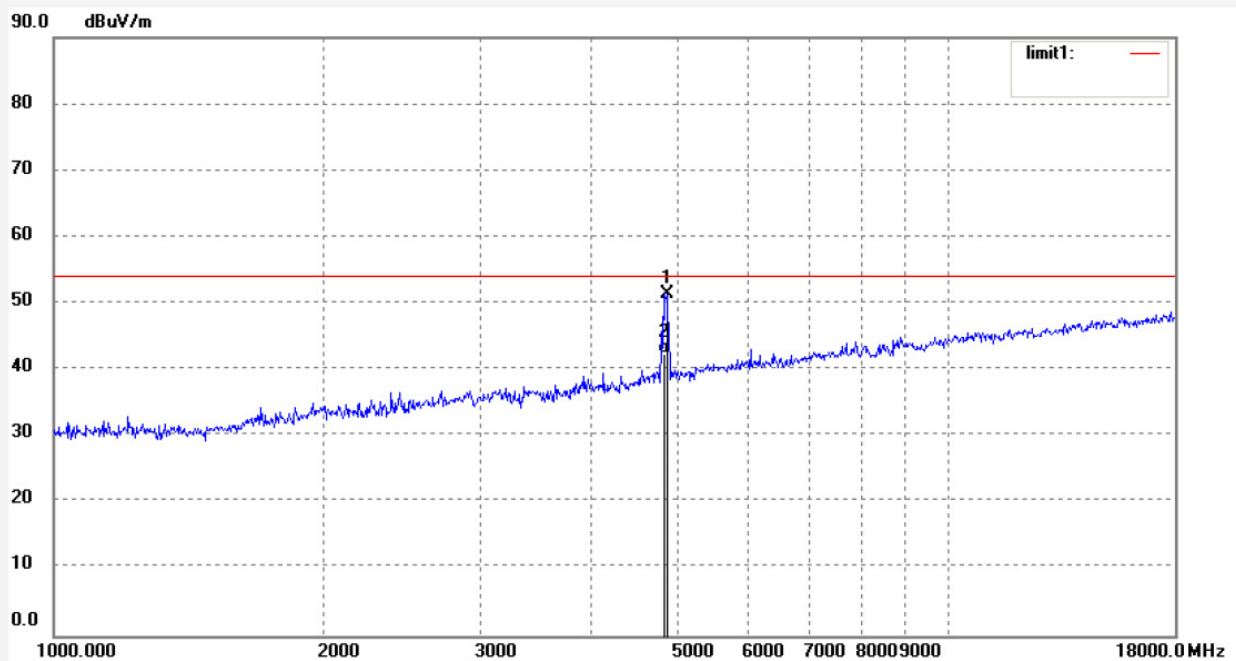
| No. | Freq. (MHz) | Reading (dBuV/m) | Factor (dB) | Result (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Detector | Height (cm) | Degree (deg.) | Remark |
|-----|-------------|------------------|-------------|-----------------|----------------|-------------|----------|-------------|---------------|--------|
| 1   | 4924.444    | 51.82            | -1.89       | 49.93           | 74.00          | -24.07      | peak     |             |               |        |
| 2   | 4924.444    | 43.64            | -1.89       | 41.75           | 54.00          | -12.25      | AVG      |             |               |        |



Job No.: STAR2016 #1895  
Standard: FCC Class B 3M Radiated  
Test item: Radiation Test  
Temp.( C)/Hum.(%) 25 C / 55 %  
EUT: Media box  
Mode: TX Channel 3 (802.11n)40MHz  
Model: MODCC32  
Manufacturer: Power 7 Technology(Dongguan)Co., Ltd

Polarization: Horizontal  
Power Source: DC 3.3V  
Date: 2016/11/05  
Time: 17/20/46  
Engineer Signature: star  
Distance: 3m

Note: Report NO.:ATE20162251

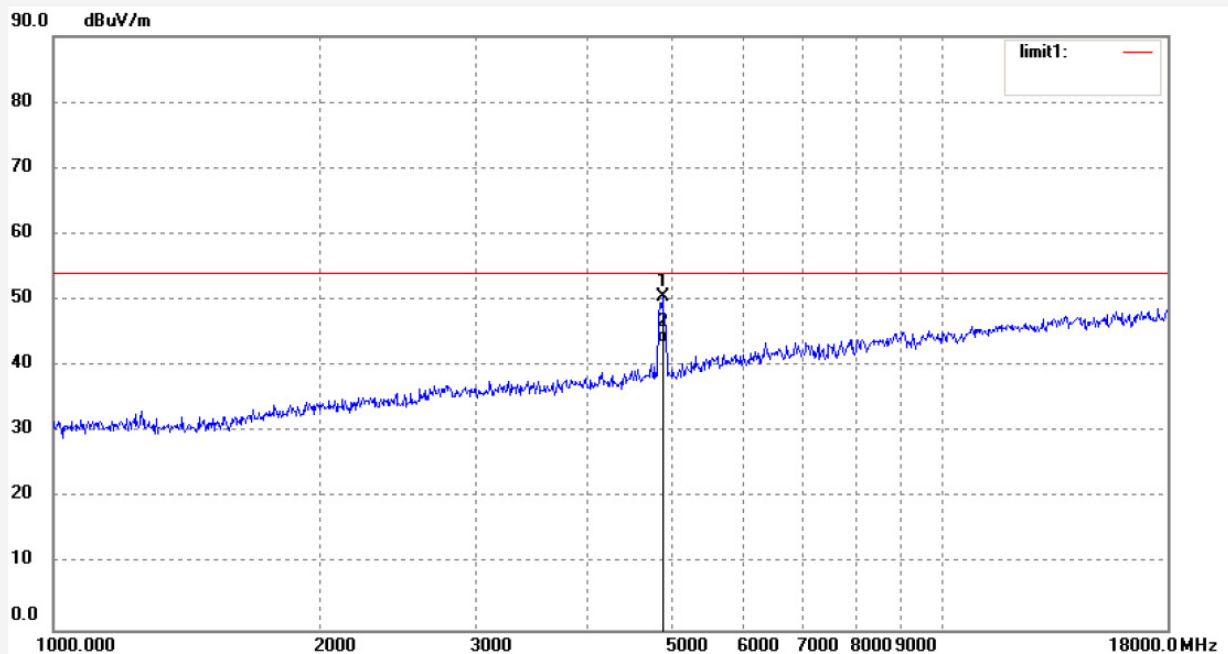


| No. | Freq. (MHz) | Reading (dBuV/m) | Factor (dB) | Result (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Detector | Height (cm) | Degree (deg.) | Remark |
|-----|-------------|------------------|-------------|-----------------|----------------|-------------|----------|-------------|---------------|--------|
| 1   | 4844.361    | 53.54            | -2.14       | 51.40           | 74.00          | -22.60      | peak     |             |               |        |
| 2   | 4844.361    | 44.64            | -2.14       | 42.50           | 54.00          | -11.50      | AVG      |             |               |        |

Job No.: STAR2016 #1894  
Standard: FCC Class B 3M Radiated  
Test item: Radiation Test  
Temp.( C)/Hum.(%) 25 C / 55 %  
EUT: Media box  
Mode: TX Channel 3 (802.11n)40MHz  
Model: MODCC32  
Manufacturer: Power 7 Technology(Dongguan)Co., Ltd

Polarization: Vertical  
Power Source: DC 3.3V  
Date: 2016/11/05  
Time: 17/19/55  
Engineer Signature: star  
Distance: 3m

Note: Report NO.:ATE20162251



| No. | Freq. (MHz) | Reading (dBuV/m) | Factor (dB) | Result (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Detector | Height (cm) | Degree (deg.) | Remark |
|-----|-------------|------------------|-------------|-----------------|----------------|-------------|----------|-------------|---------------|--------|
| 1   | 4844.557    | 52.57            | -2.14       | 50.43           | 74.00          | -23.57      | peak     |             |               |        |
| 2   | 4844.557    | 45.65            | -2.14       | 43.51           | 54.00          | -10.49      | AVG      |             |               |        |

Job No.: STAR2016 #1896

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

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

EUT: Media box

Mode: TX Channel 6 (802.11n)40MHz

Model: MODCC32

Manufacturer: Power 7 Technology(Dongguan)Co., Ltd

Polarization: Horizontal

Power Source: DC 3.3V

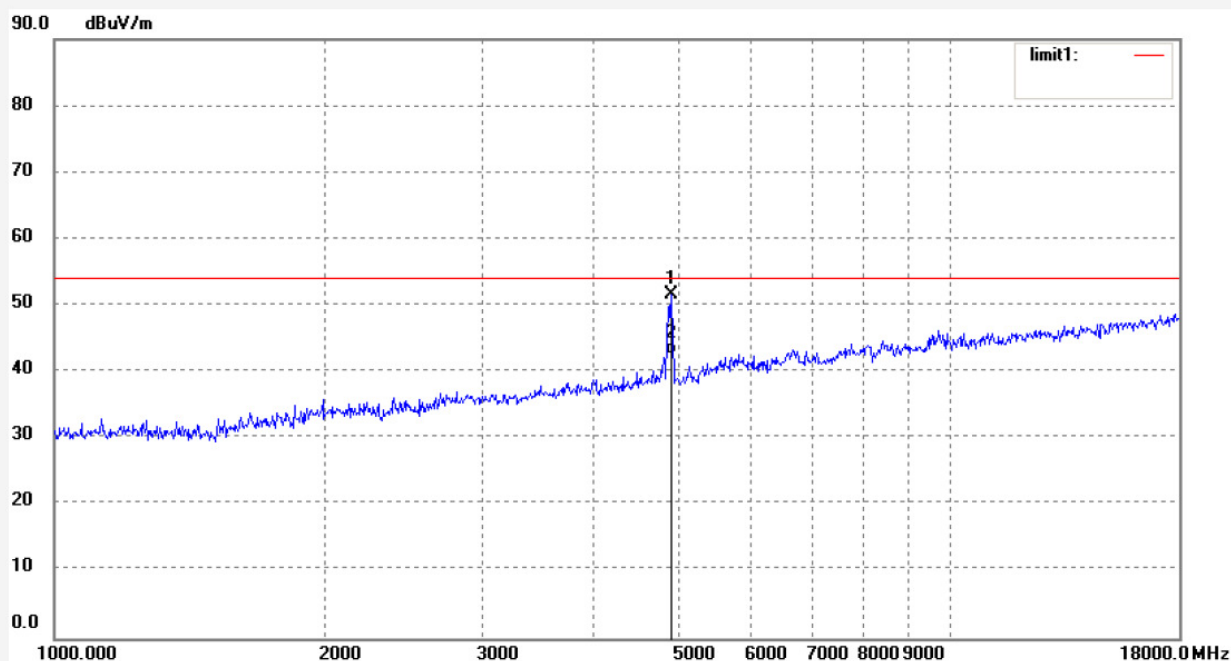
Date: 2016/11/05

Time: 17/21/59

Engineer Signature: star

Distance: 3m

Note: Report NO.:ATE20162251



| No. | Freq. (MHz) | Reading (dBuV/m) | Factor (dB) | Result (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Detector | Height (cm) | Degree (deg.) | Remark |
|-----|-------------|------------------|-------------|-----------------|----------------|-------------|----------|-------------|---------------|--------|
| 1   | 4874.017    | 53.74            | -2.05       | 51.69           | 74.00          | -22.31      | peak     |             |               |        |
| 2   | 4874.017    | 44.73            | -2.05       | 42.68           | 54.00          | -11.32      | AVG      |             |               |        |

Job No.: STAR2016 #1897

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

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

EUT: Media box

Mode: TX Channel 6 (802.11n)40MHz

Model: MODCC32

Manufacturer: Power 7 Technology(Dongguan)Co., Ltd

Polarization: Vertical

Power Source: DC 3.3V

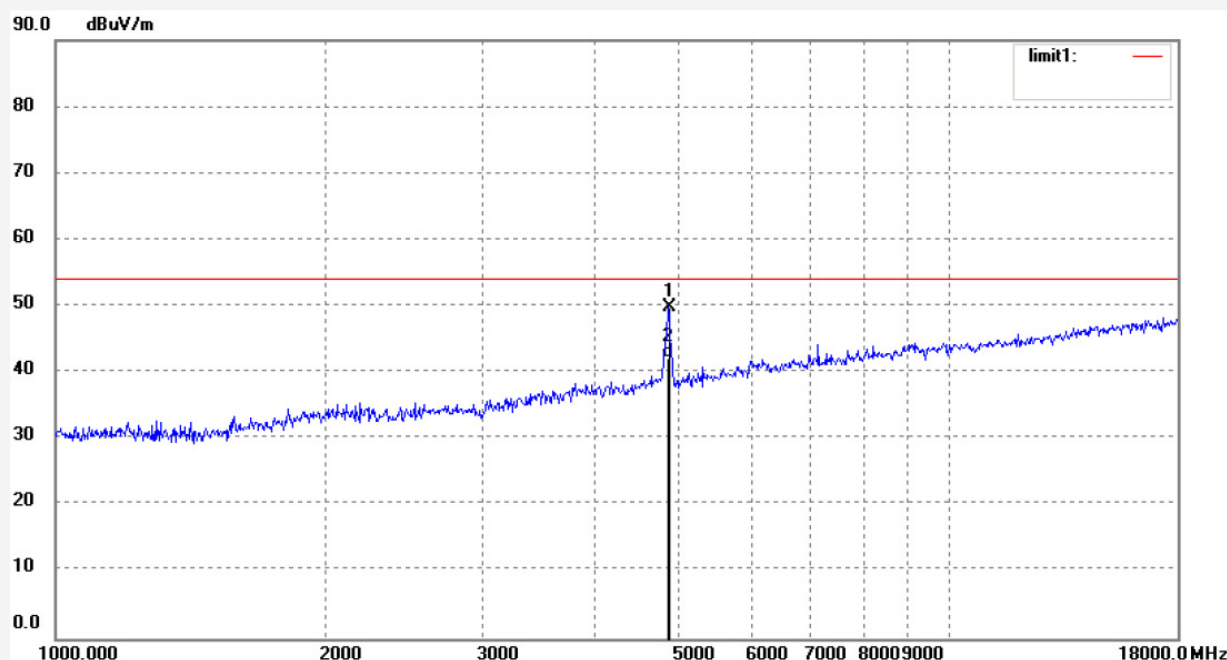
Date: 2016/11/05

Time: 17/22/50

Engineer Signature: star

Distance: 3m

Note: Report NO.:ATE20162251



| No. | Freq.<br>(MHz) | Reading<br>(dBuV/m) | Factor<br>(dB) | Result<br>(dBuV/m) | Limit<br>(dBuV/m) | Margin<br>(dB) | Detector | Height<br>(cm) | Degree<br>(deg.) | Remark |
|-----|----------------|---------------------|----------------|--------------------|-------------------|----------------|----------|----------------|------------------|--------|
| 1   | 4874.438       | 51.99               | -2.05          | 49.94              | 74.00             | -24.06         | peak     |                |                  |        |
| 2   | 4874.438       | 44.26               | -2.05          | 42.21              | 54.00             | -11.79         | AVG      |                |                  |        |



Job No.: STAR2016 #1899

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

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

EUT: Media box

Mode: TX Channel 9 (802.11n)40MHz

Model: MODCC32

Manufacturer: Power 7 Technology(Dongguan)Co., Ltd

Polarization: Horizontal

Power Source: DC 3.3V

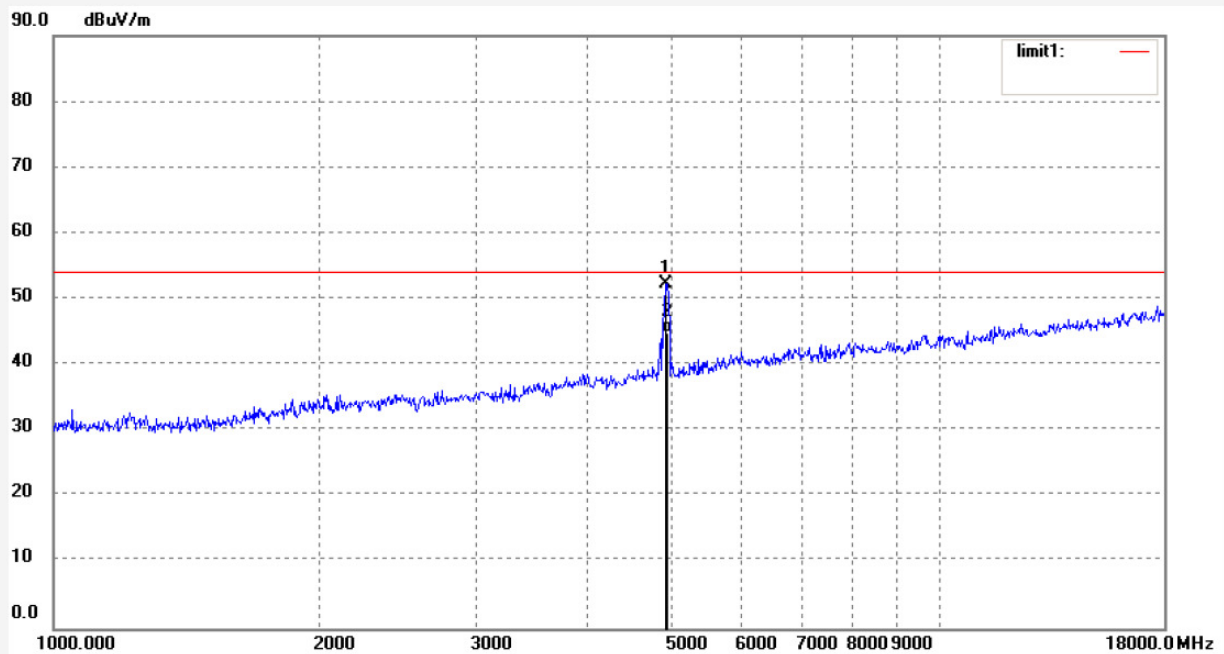
Date: 2016/11/05

Time: 17/24/53

Engineer Signature: star

Distance: 3m

Note: Report NO.:ATE20162251



| No. | Freq. (MHz) | Reading (dBuV/m) | Factor (dB) | Result (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Detector | Height (cm) | Degree (deg.) | Remark |
|-----|-------------|------------------|-------------|-----------------|----------------|-------------|----------|-------------|---------------|--------|
| 1   | 4904.137    | 54.34            | -1.96       | 52.38           | 74.00          | -21.62      | peak     |             |               |        |
| 2   | 4904.137    | 46.86            | -1.96       | 44.90           | 54.00          | -9.10       | AVG      |             |               |        |

Job No.: STAR2016 #1898

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

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

EUT: Media box

Mode: TX Channel 9 (802.11n)40MHz

Model: MODCC32

Manufacturer: Power 7 Technology(Dongguan)Co., Ltd

Polarization: Vertical

Power Source: DC 3.3V

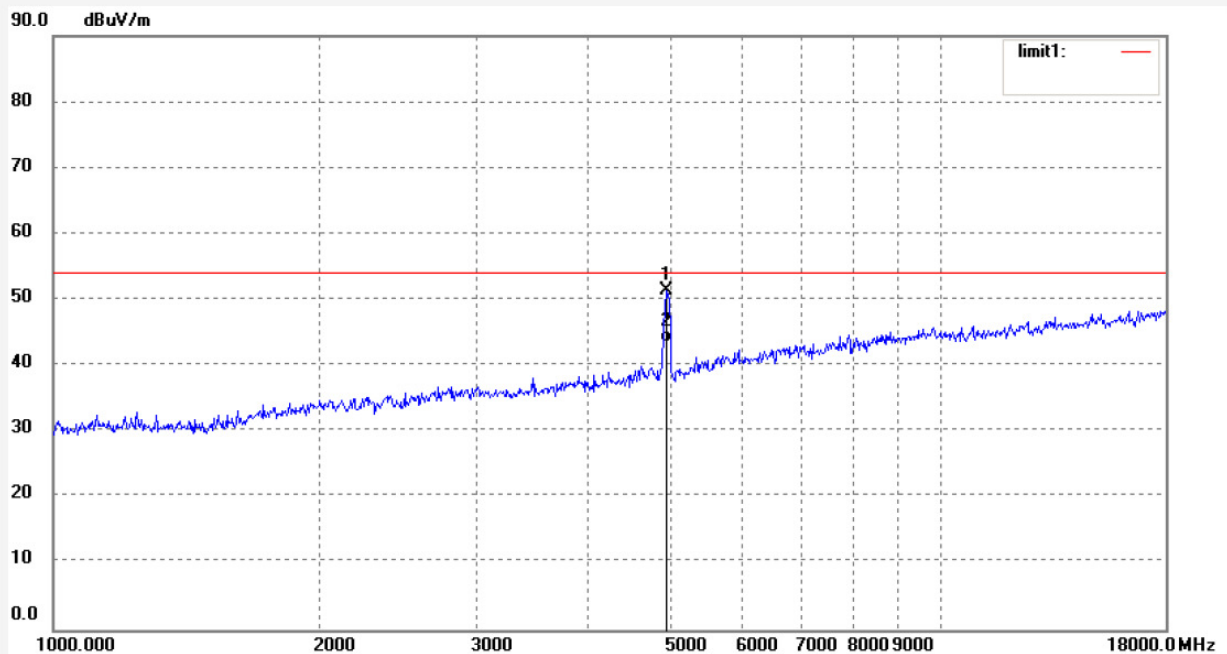
Date: 2016/11/05

Time: 17/23/56

Engineer Signature: star

Distance: 3m

Note: Report NO.:ATE20162251



| No. | Freq. (MHz) | Reading (dBuV/m) | Factor (dB) | Result (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Detector | Height (cm) | Degree (deg.) | Remark |
|-----|-------------|------------------|-------------|-----------------|----------------|-------------|----------|-------------|---------------|--------|
| 1   | 4904.069    | 53.32            | -1.96       | 51.36           | 74.00          | -22.64      | peak     |             |               |        |
| 2   | 4904.069    | 45.44            | -1.96       | 43.48           | 54.00          | -10.52      | AVG      |             |               |        |

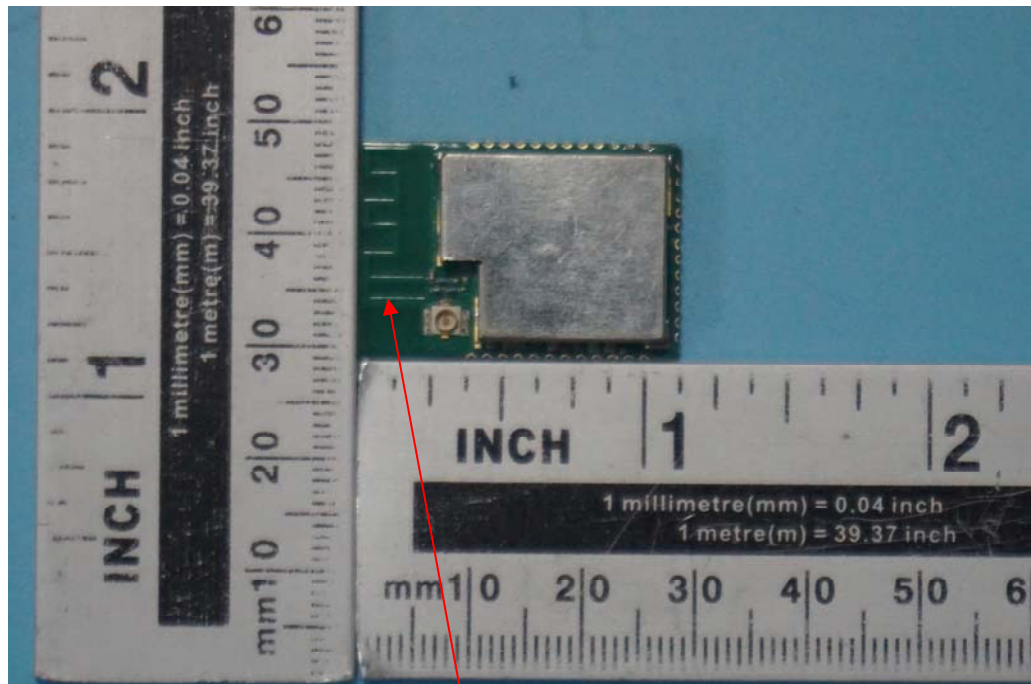
## 11.ANTENNA REQUIREMENT

### 11.1.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.

### 11.2.Antenna Construction

The module must contain a permanently attached antenna, or contain a unique antenna connector, and be marketed and operated only with specific antenna(s), per Sections 15.203, 15.204(b), 15.204(c), 15.212(a), 2.929(b); The Antenna gain of EUT is 2.5dBi. Therefore, the equipment complies with the antenna requirement..



Antenna