

FCC RADIO TEST REPORT FCC ID: 2AKJYAVIDONE

Product: AvidCor

Trade Name: AvidCor

Model Name: avidone

Serial Model: N/A

Report No.: POCE-1612072541F

Prepared for

Venturit Inc.

325 East Grand River Ave, STE 318, East Lansing, Michigan 48823, USA

Prepared by

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Baoan District,Shenzhen, China



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TEST RESULT CERTIFICATION

| Applicant's name | . Venturit Inc. | | | |
|-----------------------------|----------------------|----------------|---|--|
| Address | . 325 East Grand Ri | ver Ave, ST | E 318, East Lansing, M | ichigan 48823, USA |
| Manufacture's Name | . Venturit Inc. | | | |
| Address | · 325 East Grand Ri | ver Ave, ST | E 318, East Lansing, M | ichigan 48823, USA |
| Product description | | | | |
| Product name | . AvidCor | | | |
| Model and/or type reference | avidone | | | |
| Trade Name | AvidCor | | | |
| Standards | · FCC Part15.247, K | KDB558074 | D01 DTS Meas Guidan | ce v03r03 |
| Test procedure | . ANSI C63.10: 2013 | 3 | | |
| | | | and the test results show and it is applicable only to | that the equipment under the tested sample |
| This report shall not be | reproduced except in | full, without | the written approval of P | OCE, this document may |
| • | • | y, and shall b | pe noted in the revision o | f the document. |
| Date of Test | | | | |
| Date (s) of performance | | | ec. 2016 | |
| Date of Issue | 12 Dec | . 2016 | | |
| Test Result | Pass | | | |
| Tes | ting Engineer : | : | Ken Li (Ken Li) | |
| Tec | hnical Manager : | : | Jenny Yaz | |

Authorized Signatory:



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1. SUMMARY OF TEST RESULTS

Test procedures according to the technical standards:

| K | FCC Part15 (15.247) , Subpart (DB558074 D01 DTS Meas Guidance | | |
|---------------------------|---|----------|--------|
| Standard Section | Test Item | Judgment | Remark |
| 15.207(a) | AC Conducted Emission | N/A | |
| 15.247 (a)(2) | 6dB Bandwidth | PASS | |
| 15.247 (b)(3) 15.31(e) | Peak Output Power | PASS | |
| 15.247 (d) 15.205 | Radiated Spurious Emission | PASS | |
| 15.247 (e) | Power Spectral Density | PASS | |
| 15.247(d), 15.205 | Band Edge Emission | PASS | |
| 15.203 | Antenna Requirement | PASS | |

NOTE:

(1)" N/A" denotes test is not applicable in this Test Report



1.1 TEST FACILITY

Shenzhen POCE Technology Co.,Ltd.

Add.: Room 502, Bldg. 1, Xinghua Garden, Baoan Road Xixiang, Baoan District, Shenzhen,

China

FCC-Registration No.: 222278

1.2 MEASUREMENT UNCERTAINTY

The reported uncertainty of measurement $\mathbf{y} \pm \mathbf{U}$, where expended uncertainty \mathbf{U} is based on a standard uncertainty multiplied by a coverage factor of $\mathbf{k=2}$, providing a level of confidence of approximately 95 % $^{\circ}$

| No. | Item | Uncertainty |
|-----|------------------------------|-------------|
| 1 | Conducted Emission Test | ±1.38dB |
| 2 | RF power,conducted | ±0.16dB |
| 3 | Spurious emissions,conducted | ±0.21dB |
| 4 | All emissions,radiated(<1G) | ±4.68dB |
| 5 | All emissions,radiated(>1G) | ±4.89dB |
| 6 | Temperature | ±0.5°C |
| 7 | Humidity | ±2% |



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2. GENERAL INFORMATION

2.1 GENERAL DESCRIPTION OF EUT

| Equipment | AvidCor | |
|------------------------|------------------------|--|
| Trade Name | AvidCor | |
| Model Name | avidone | |
| Serial Model | N/A | |
| Model Difference | N/A | |
| Product Description | User's Manual, the El | 2402~2480 MHz GFSK Bluetooth 4.0 40CH Please see Note 3. |
| Channel List | Please refer to the No | ote 2. |
| Battery | DC 3V, DL2032 | |
| Connecting I/O Port(s) | Please refer to the Us | er's Manual |

Note:



1. For a more detailed features description, please refer to the manufacturer's specifications or the User's Manual.

2.

| | | | Chanr | nel List | | | |
|---------|--------------------|---------|--------------------|----------|--------------------|---------|--------------------|
| Channel | Frequency (MHz) | Channel | Frequency (MHz) | Channel | Frequency (MHz) | Channel | Frequency (MHz) |
| 00 | 2402 | 10 | 2422 | 20 | 2442 | 30 | 2462 |
| 01 | 2404 | 11 | 2424 | 21 | 2444 | 31 | 2464 |
| 02 | 2406 | 12 | 2426 | 22 | 2446 | 32 | 2466 |
| 03 | 2408 | 13 | 2428 | 23 | 2448 | 33 | 2468 |
| 04 | 2410 | 14 | 2430 | 24 | 2450 | 34 | 2470 |
| 05 | 2412 | 15 | 2432 | 25 | 2452 | 35 | 2472 |
| 06 | 2414 | 16 | 2434 | 26 | 2454 | 36 | 2474 |
| 07 | 2416 | 17 | 2436 | 27 | 2456 | 37 | 2476 |
| 08 | 2418 | 18 | 2438 | 28 | 2458 | 38 | 2478 |
| 09 | 2420 | 19 | 2440 | 29 | 2460 | 39 | 2480 |

3.

Table for Filed Antenna

| Ant | Brand | Model Name | Antenna Type | Connector | Gain (dBi) | NOTE |
|-----|-------|------------|----------------|-----------|------------|------|
| Α | N/A | N/A | PCB Antenna | N/A | 0.5 | N/A |



2.2 DESCRIPTION OF TEST MODES

To investigate the maximum EMI emission characteristics generates from EUT, the test system was pre-scanning tested base on the consideration of following EUT operation mode or test configuration mode which possible have effect on EMI emission level. Each of these EUT operation mode(s) or test configuration mode(s) mentioned above was evaluated respectively.

| Pretest Mode | Description |
|--------------|-------------|
| Mode 1 | TX 2402 |
| Mode 2 | TX 2440 |
| Mode 3 | TX 2480 |
| Mode 4 | Link Mode |

| | For Conducted Emission |
|-----------------|------------------------|
| Final Test Mode | Description |
| Mode 4 | N/A |

| | For Radiated Emission |
|-----------------|-----------------------|
| Final Test Mode | Description |
| Mode 1 | TX 2402 |
| Mode 2 | TX 2440 |
| Mode 3 | TX 2480 |
| Mode 4 | Link Mode |

Note:

(1) The measurements are performed at the highest, middle, lowest available channels.



| 2.3 BLOCK DIGRAM SHOWING THE CONFIGURATION OF SYSTEM TESTER |
|---|
|---|

E-1 EUT



2.4 DESCRIPTION OF SUPPORT UNITS(CONDUCTED MODE)

The EUT has been tested as an independent unit together with other necessary accessories or support units. The following support units or accessories were used to form a representative test configuration during the tests.

| Item | Equipment | Mfr/Brand | Model/Type No. | Series No. | Note |
|------|-----------|-----------|----------------|------------|------|
| E-1 | AvidCor | AvidCor | avidone | N/A | EUT |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |

| Item | Shielded Type | Ferrite Core | Length | Note |
|------|---------------|--------------|--------|------|
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |

Note:

- (1) The support equipment was authorized by Declaration of Confirmation.
- (2) For detachable type I/O cable should be specified the length in cm in <code>"Length_"</code> column.



2.5 EQUIPMENTS LIST FOR ALL TEST ITEMS

Radiation Test equipment

| Naui | Radiation rest equipment | | | | | | |
|------|--------------------------|--------------|-----------------|----------------|------------------|------------------|---------------------|
| Item | Kind of Equipment | Manufacturer | Type No. | Serial No. | Last calibration | Calibrated until | Calibratio n period |
| 1 | Spectrum Analyzer | Agilent | E4407B | MY4510804 0 | 2016.07.06 | 2017.07.05 | 1 year |
| 2 | Test Receiver | R&S | ESPI | 101318 | 2016.06.07 | 2017.06.06 | 1 year |
| 3 | Bilog Antenna | TESEQ | CBL6111D | 31216 | 2016.07.06 | 2017.07.05 | 1 year |
| 4 | 50Ω Coaxial Switch | Anritsu | MP59B | 620026441 6 | 2016.06.07 | 2017.06.06 | 1 year |
| 5 | Spectrum Analyzer | ADVANTEST | R3132 | 150900201 | 2016.06.07 | 2017.06.06 | 1 year |
| 6 | Horn Antenna | EM | EM-AH-101 80 | 2011071402 | 2016.07.06 | 2017.07.05 | 1 year |
| 7 | Horn Ant | Schwarzbeck | BBHA 9170 | 9170-181 | 2016.07.06 | 2017.07.05 | 1 year |
| 8 | Amplifier | EM | EM-30180 | 060538 | 2015.12.22 | 2016.12.21 | 1 year |
| 9 | Loop Antenna | ARA | PLA-1030/B | 1029 | 2016.06.08 | 2017.06.07 | 1 year |

Conduction Test equipment

| Cond | iuction rest equipi | ment | | | | | |
|------|--------------------------|------------------|----------|------------|------------------|------------------|--------------------|
| Item | Kind of Equipment | Manufactu rer | Type No. | Serial No. | Last calibration | Calibrated until | Calibration period |
| 1 | Test Receiver | R&S | ESCI | 101160 | 2016.06.06 | 2017.06.05 | 1 year |
| 2 | LISN | R&S | ENV216 | 101313 | 2016.08.24 | 2017.08.23 | 1 year |
| 3 | LISN | EMCO | 3816/2 | 00042990 | 2016.08.24 | 2017.08.23 | 1 year |
| 4 | 50Ω Coaxial Switch | Anritsu | MP59B | 6200264417 | 2016.06.07 | 2017.06.06 | 1 year |
| 5 | Passive Voltage Probe | R&S | ESH2-Z3 | 100196 | 2016.06.07 | 2017.06.06 | 1 year |
| 6 | Absorbing clamp | R&S | MOS-21 | 100423 | 2016.06.08 | 2017.06.07 | 1 year |



3. EMC EMISSION TEST

3.1 CONDUCTED EMISSION MEASUREMENT

3.1.1 POWER LINE CONDUCTED EMISSION Limits (Frequency Range 150KHz-30MHz)

| FREQUENCY (MHz) | Class A (dBuV) | | Class B (dBuV) | | Standard |
|-----------------|----------------|---------|----------------|-----------|-----------|
| PREQUENCY (MHZ) | Quasi-peak | Average | Quasi-peak | Average | Stariuaru |
| 0.15 -0.5 | 79.00 | 66.00 | 66 - 56 * | 56 - 46 * | CISPR |
| 0.50 -5.0 | 73.00 | 60.00 | 56.00 | 46.00 | CISPR |
| 5.0 -30.0 | 73.00 | 60.00 | 60.00 | 50.00 | CISPR |

| 0.15 -0.5 | 79.00 | 66.00 | 66 - 56 * | 56 - 46 * | FCC |
|-----------|-------|-------|-----------|-----------|-----|
| 0.50 -5.0 | 73.00 | 60.00 | 56.00 | 46.00 | FCC |
| 5.0 -30.0 | 73.00 | 60.00 | 60.00 | 50.00 | FCC |

Note:

- (1) The tighter limit applies at the band edges.
- (2) The limit of " * " marked band means the limitation decreases linearly with the logarithm of the frequency in the range.

The following table is the setting of the receiver

| Receiver Parameters | Setting |
|---------------------|----------|
| Attenuation | 10 dB |
| Start Frequency | 0.15 MHz |
| Stop Frequency | 30 MHz |
| IF Bandwidth | 9 kHz |



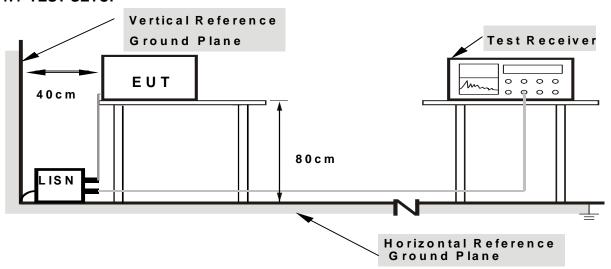
3.1.2 TEST PROCEDURE

- a. The EUT was placed 0.4 meters from the horizontal ground plane with EUT being connected to the power mains through a line impedance stabilization network (LISN). All other support equipments powered from additional LISN(s). The LISN provide 50 Ohm/ 50uH of coupling impedance for the measuring instrument.
- b. Interconnecting cables that hang closer than 40 cm to the ground plane shall be folded back and forth in the center forming a bundle 30 to 40 cm long.
- c. I/O cables that are not connected to a peripheral shall be bundled in the center. The end of the cable may be terminated, if required, using the correct terminating impedance. The overall length shall not exceed 1 m.
- d. LISN at least 80 cm from nearest part of EUT chassis.
- e. For the actual test configuration, please refer to the related Item –EUT Test Photos.

3.1.3 DEVIATION FROM TEST STANDARD

No deviation

3.1.4 TEST SETUP



Note: 1.Support units were connected to second LISN.

2.Both of LISNs (AMN) are 80 cm from EUT and at least 80 from other units and other metal planes

3.1.5 EUT OPERATING CONDITIONS

The EUT was configured for testing in a typical fashion (as a customer would normally use it). The EUT has been programmed to continuously transmit during test. This operating condition was tested and used to collect the included data.



3.1.6 TEST RESULTS

| EUT: | AvidCor | Model Name. : | avidone |
|----------------|-------------|--------------------|---------|
| Temperature : | 26 ℃ | Relative Humidity: | 54% |
| Pressure: | 1010hPa | Phase : | L |
| Test Voltage : | N/A | Test Mode: | N/A |

Note: DC 3.0V powered, AC conducted emission not was required.



3.2 RADIATED EMISSION MEASUREMENT

3.2.1 RADIATED EMISSION LIMITS (Frequency Range 9kHz-1000MHz)

20dBc in any 100 kHz bandwidth outside the operating frequency band. In case the emission fall within the restricted band specified on 15.205(a), then the 15.209(a) limit in the table below has to be followed.

| Frequencies | Field Strength | Measurement Distance |
|-------------|--------------------|----------------------|
| (MHz) | (micorvolts/meter) | (meters) |
| 0.009~0.490 | 2400/F(KHz) | 300 |
| 0.490~1.705 | 24000/F(KHz) | 30 |
| 1.705~30.0 | 30 | 30 |
| 30~88 | 100 | 3 |
| 88~216 | 150 | 3 |
| 216~960 | 200 | 3 |
| Above 960 | 500 | 3 |

Above 1GHz

| Spectrum Parameter | Setting | |
|---------------------------------|--|--|
| Attenuation | Auto | |
| Start Frequency | 1000 MHz | |
| Stop Frequency | 10th carrier harmonic | |
| RB / VB (emission in restricted | 1 MHz / 1 MHz for Dook, 1 MHz / 10Hz for Average | |
| band) | 1 MHz / 1 MHz for Peak, 1 MHz / 10Hz for Average | |

Below 1GHz

| Receiver Parameter | Setting | | |
|------------------------|----------------------------------|--|--|
| Attenuation | Auto | | |
| Start ~ Stop Frequency | 9kHz~150kHz / RB 200Hz for QP | | |
| Start ~ Stop Frequency | 150kHz~30MHz / RB 9kHz for QP | | |
| Start ~ Stop Frequency | 30MHz~1000MHz / RB 120kHz for QP | | |



3.2.2 TEST PROCEDURE

- a. The measuring distance of at 3 m shall be used for measurements at frequency up to 1GHz. For frequencies above 1GHz, any suitable measuring distance may be used.
- b. The EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3 meter open area test site. The table was rotated 360 degrees to determine the position of the highest radiation.
- c. The height of the equipment or of the substitution antenna shall be 0.8 m; the height of the test antenna shall vary between 1 m to 4 m. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
- d. The initial step in collecting conducted emission data is a spectrum analyzer peak detector mode pre-scanning the measurement frequency range. Significant peaks are then marked and then Quasi Peak detector mode re-measured.
- e. If the Peak Mode measured value compliance with and lower than Quasi Peak Mode Limit, the EUT shall be deemed to meet QP Limits and then no additional QP Mode measurement performed.
- f. For the actual test configuration, please refer to the related Item –EUT Test Photos.

Both horizontal and vertical antenna polarities were tested and performed pretest to three orthogonal axis. The worst case emissions were reported

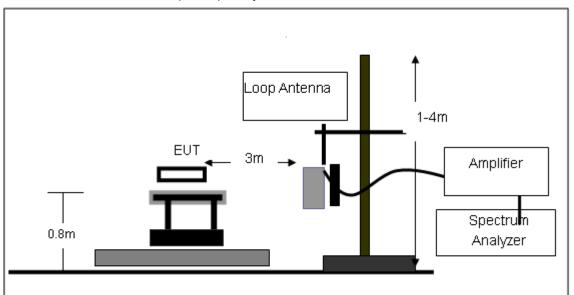
3.2.3 DEVIATION FROM TEST STANDARD

No deviation

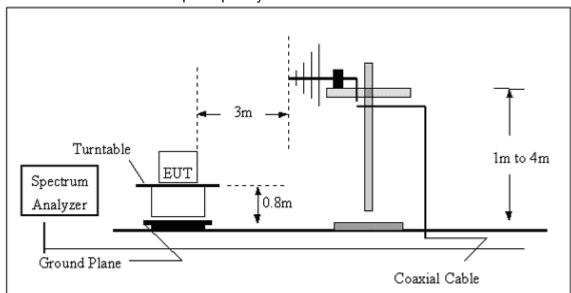


3.2.4 TEST SETUP

(A) Radiated Emission Test-Up Frequency Below 30MHz

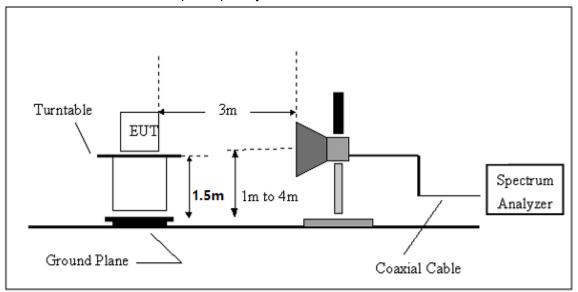


(B) Radiated Emission Test-Up Frequency 30MHz~1GHz





(C) Radiated Emission Test-Up Frequency Above 1GHz



3.2.5 EUT OPERATING CONDITIONS

The EUT tested system was configured as the statements of 2.4 Unless otherwise a special operating condition is specified in the follows during the testing.



3.2.6 TEST RESULTS (BETWEEN 9KHZ - 30 MHZ)

| EUT: | AvidCor | Model Name. : | avidone |
|--------------|-------------|---------------------|---------|
| Temperature: | 20 ℃ | Relative Humidtity: | 48% |
| Pressure: | 1010 hPa | Test Voltage : | DC3.0V |
| Test Mode: | TX | Polarization : | |

| Freq. | Reading | Limit | Margin | State |
|-------|----------|----------|--------|-------|
| (MHz) | (dBuV/m) | (dBuV/m) | (dB) | P/F |
| | | | | PASS |
| | | | | PASS |

NOTE:

The amplitude of spurious emissions which are attenuated by more than 20dB below the permissible value has no need to be reported.

Distance extrapolation factor =40 log (specific distance/test distance)(dB);

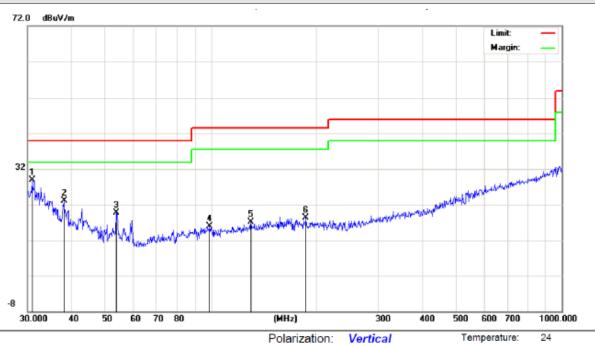
Limit line = specific limits(dBuv) + distance extrapolation factor.



3.2.7 TEST RESULTS (BETWEEN 30MHZ - 1GHZ)

| EUT: | AvidCor | Model Name : | avidone |
|---------------|-------------|--------------------|---------|
| Temperature : | 20 ℃ | Relative Humidity: | 48% |
| Pressure: | 1010 hPa | Test Voltage : | DC3.0V |

Test Mode : Mode 2



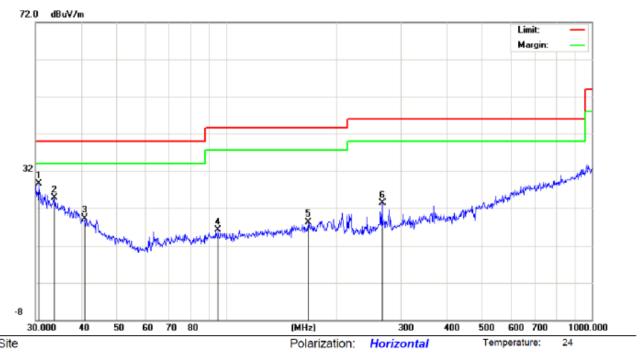
Limit: FCC_PART15_B_03m_QP ... Humidity: 50 %

| No. | Mk. | Freq. | Reading Level | Correct Factor | Measure- ment | Limit | Over | |
|-----|-----|----------|------------------|-------------------|------------------|--------|-------|----------|
| | | MHz | dBu∀ | dB | dBuV/m | dBuV/m | dB | Detector |
| 1 | İ | 31.7313 | 16.65 | 18.95 | 35.60 | 40.00 | -4.40 | QP |
| 2 | į | 39.2991 | 21.76 | 14.97 | 36.73 | 40.00 | -3.27 | QP |
| 3 | İ | 49.8813 | 27.15 | 9.60 | 36.75 | 40.00 | -3.25 | QP |
| 4 | * | 71.8319 | 27.41 | 9.59 | 37.00 | 40.00 | -3.00 | QP |
| 5 | İ | 77.0504 | 27.46 | 9.54 | 37.00 | 40.00 | -3.00 | QP |
| 6 | | 601.4265 | 16.79 | 19.49 | 36.28 | 46.00 | -9.72 | QP |



| EUT: | AvidCor | Model Name : | avidone | | | |
|----------------|-------------|--------------------|---------|--|--|--|
| Temperature : | 20 ℃ | Relative Humidity: | 48% | | | |
| Pressure: | 1010 hPa | Test Voltage : | DC3.0V | | | |
| T (M) . M O | | | | | | |

Test Mode : Mode 2



Limit: FCC_PART15_B_03m_QP Humidity: 50 %

| No. | Mk | . Freq. | Reading Level | Correct Factor | Measure- ment | Limit | Over | |
|-----|----|----------|------------------|-------------------|------------------|--------|--------|----------|
| | | MHz | dBu∀ | dB | dBuV/m | dBuV/m | dB | Detector |
| 1 | | 30.4237 | 6.74 | 19.42 | 26.16 | 40.00 | -13.84 | QP |
| 2 | * | 49.8813 | 26.79 | 9.60 | 36.39 | 40.00 | -3.61 | QP |
| 3 | ļ | 77.0504 | 26.55 | 9.54 | 36.09 | 40.00 | -3.91 | QP |
| 4 | | 197.8926 | 18.28 | 11.45 | 29.73 | 43.50 | -13.77 | QP |
| 5 | | 601.4265 | 16.00 | 19.49 | 35.49 | 46.00 | -10.51 | QP |
| 6 | | 833.3170 | 13.62 | 23.16 | 36.78 | 46.00 | -9.22 | QP |



3.2.8 TEST RESULTS (1 GHZ-25GHZ)

| EUT: | AvidCor | Model Name : | avidone |
|---------------|-------------|--------------------|---------|
| Temperature : | 20 ℃ | Relative Humidity: | 48% |
| Pressure: | 1010 hPa | Test Voltage : | DC3.0V |

| - | | | • | | • | | |
|-----------|---------------|------------|---------------------|----------|--------|--------|------------|
| Frequency | Meter Reading | Factor | Emission Level | Limits | Margin | Remark | Comment |
| (MHz) | (dBµV) | (dB) | (dBµV/m) | (dBµV/m) | (dB) | Remark | Comment |
| | | Low Chanr | nel (2402 MHz)-Abo | ve 1G | | | |
| 4804.225 | 55.36 | -3.64 | 59.00 | 74.00 | -15.00 | Pk | Vertical |
| 4804.225 | 39.36 | -3.64 | 43.00 | 54.00 | -11.00 | AV | Vertical |
| 7206.177 | 60.25 | -0.95 | 61.20 | 74.00 | -12.80 | Pk | Vertical |
| 7206.177 | 41.36 | -0.95 | 42.31 | 54.00 | -11.69 | AV | Vertical |
| 4804.336 | 58.58 | -3.64 | 62.22 | 74.00 | -11.78 | Pk | Horizontal |
| 4804.336 | 41.69 | -3.64 | 45.33 | 54.00 | -8.67 | AV | Horizontal |
| 7206.258 | 57.15 | -0.95 | 58.10 | 74.00 | -15.90 | Pk | Horizontal |
| 7206.258 | 41.33 | -0.95 | 42.28 | 54.00 | -11.72 | AV | Horizontal |
| | | Mid Chann | nel (2441 MHz)-Abo | ve 1G | | | |
| 4880.274 | 60.25 | -3.68 | 63.93 | 74.00 | -10.07 | Pk | Vertical |
| 4880.274 | 38.58 | -3.68 | 42.26 | 54.00 | -11.74 | AV | Vertical |
| 7320.175 | 58.58 | -0.82 | 59.40 | 74.00 | -14.60 | Pk | Vertical |
| 7320.175 | 41.25 | -0.82 | 42.07 | 54.00 | -11.93 | AV | Vertical |
| 4880.258 | 58.33 | -3.68 | 62.01 | 74.00 | -11.99 | Pk | Horizontal |
| 4880.258 | 41.02 | -3.68 | 44.70 | 54.00 | -9.30 | AV | Horizontal |
| 7320.102 | 57.36 | -0.82 | 58.18 | 74.00 | -15.82 | Pk | Horizontal |
| 7320.102 | 41.25 | -0.82 | 42.07 | 54.00 | -11.93 | AV | Horizontal |
| | | High Chanr | nel (2480 MHz)- Abo | ove 1G | | | |
| 4960.584 | 57.15 | -3.59 | 60.74 | 74.00 | -13.26 | Pk | Vertical |
| 4960.584 | 40.02 | -3.59 | 43.61 | 54.00 | -10.39 | AV | Vertical |
| 7440.299 | 57.33 | -0.68 | 58.01 | 74.00 | -15.99 | Pk | Vertical |
| 7440.299 | 39.33 | -0.68 | 40.01 | 54.00 | -13.99 | AV | Vertical |
| 4960.175 | 57.58 | -3.59 | 61.17 | 74.00 | -12.83 | Pk | Horizontal |
| 4960.175 | 39.66 | -3.59 | 43.25 | 54.00 | -10.75 | AV | Horizontal |
| 7440.332 | 61.02 | -0.68 | 61.70 | 74.00 | -12.30 | Pk | Horizontal |
| 7440.332 | 40.47 | -0.68 | 41.15 | 54.00 | -12.85 | AV | Horizontal |

Note: (1) All Readings are Peak Value (VBW=3MHz) and Peak Value (VBW=10Hz).

- (2) Emission Level= Reading Level+Probe Factor +Cable Loss.
- (3)All other emissions more than 20dB below the limit.



EUT: AvidCor Model Name: avidone

Temperature: 20 °C Relative Humidity: 48%

Pressure: 1010 hPa Test Voltage: DC3.0V

Report No.: POCE-1612072541F

| Frequency | Meter Reading | Factor | Emission Level | Limits | Margin | Detector | C |
|-----------|---------------|--------|----------------|----------|--------|----------|------------|
| (MHz) | (dBµV) | (dB) | (dBµV/m) | (dBµV/m) | (dB) | Туре | Comment |
| | | | 1Mbps | 3 | | | |
| 2329.29 | 62.43 | -13.06 | 49.37 | 74 | -24.63 | Pk | Vertical |
| 2329.29 | 56.57 | -13.06 | 43.51 | 54 | -10.49 | AV | Vertical |
| 2400 | 65.61 | -13.06 | 52.55 | 74 | -21.45 | Pk | Vertical |
| 2400 | 56.08 | -13.06 | 43.02 | 54 | -10.98 | AV | Vertical |
| 2380.8 | 62.31 | -13.06 | 49.25 | 74 | -24.75 | Pk | Horizontal |
| 2380.8 | 57.46 | -13.06 | 44.4 | 54 | -9.6 | AV | Horizontal |
| 2400 | 66.06 | -13.06 | 53 | 74 | -21 | Pk | Horizontal |
| 2400 | 56.89 | -13.06 | 43.83 | 54 | -10.17 | AV | Horizontal |
| 2483.5 | 63.14 | -12.78 | 50.36 | 74 | -23.64 | Pk | Vertical |
| 2483.5 | 62.66 | -12.78 | 49.88 | 54 | -4.12 | AV | Vertical |
| 2483.5 | 62.86 | -12.78 | 50.08 | 74 | -23.92 | Pk | Horizontal |
| 2483.5 | 62.52 | -12.78 | 49.74 | 54 | -4.26 | AV | Horizontal |

Note: (1) All other emissions more than 20dB below the limit.



4. POWER SPECTRAL DENSITY TEST

4.1 APPLIED PROCEDURES / LIMIT

| | FCC Part15 (15.247) , Subpart C | | | | | |
|---------|---------------------------------|------------------------|--------------------------|--------|--|--|
| Section | Test Item | Limit | Frequency Range (MHz) | Result | | |
| 15.247 | Power Spectral Density | 8 dBm (in any 3KHz) | 2400-2483.5 | PASS | | |

4.1.1 TEST PROCEDURE

- 1. Set analyzer center frequency to DTS channel center frequency.
- 2. Set the span to 1.5 times the DTS channel bandwidth.
- 3. Set the RBW \geq 3 kHz.
- 4. Set the VBW \geq 3 x RBW.
- 5. Detector = peak.
- 6. Sweep time = auto couple.
- 7. Trace mode = max hold.
- 8. Allow trace to fully stabilize.
- 9. Use the peak marker function to determine the maximum amplitude level.
- 10. If measured value exceeds limit, reduce RBW (no less than 3 kHz) and repeat.

4.1.2 DEVIATION FROM STANDARD

No deviation.

4.1.3 TEST SETUP

| EUT | SPECTRUM |
|-----|----------|
| | ANALYZER |

4.1.4 EUT OPERATION CONDITIONS

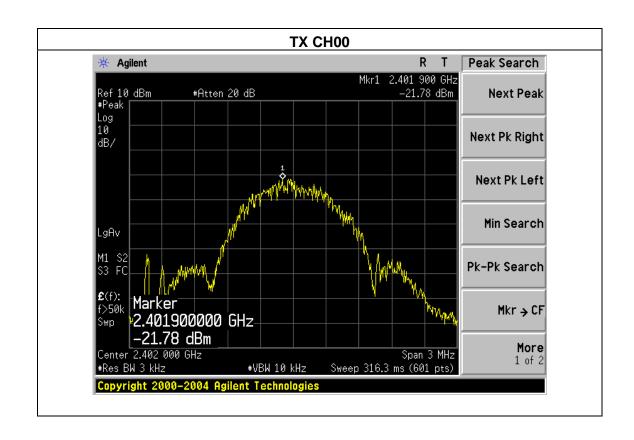
The EUT tested system was configured as the statements of 2.1 Unless otherwise a special operating condition is specified in the follows during the testing.



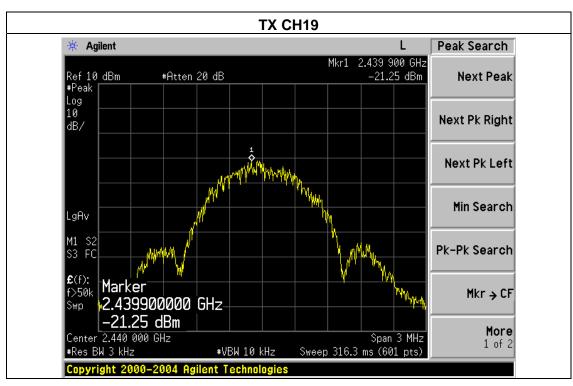
4.1.5 TEST RESULTS

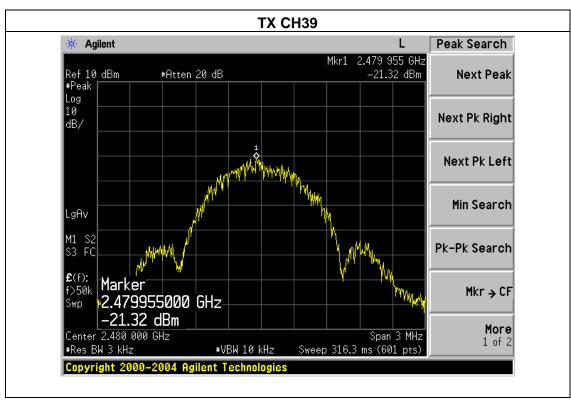
| EUT: | AvidCor | Model Name : | avidone |
|---------------|---------------------------|--------------------|---------|
| Temperature : | 25 ℃ | Relative Humidity: | 60% |
| Pressure : | 1015 hPa | Test Voltage : | DC3.0V |
| Test Mode : | TX Mode /CH00, CH19, CH39 | | |

| Frequency | Power Density (dBm) | Limit (dBm) | Result |
|-----------|------------------------|----------------|--------|
| 2402 MHz | -21.78 | 8 | PASS |
| 2440 MHz | -21.25 | 8 | PASS |
| 2480 MHz | -21.32 | 8 | PASS |











5. BANDWIDTH TEST

5.1 APPLIED PROCEDURES / LIMIT

| All LIED I ROOEDORES / Elimit | | | | |
|---------------------------------|---|------------------------------|-------------|------|
| FCC Part15 (15.247) , Subpart C | | | | |
| Section | Section Test Item Limit Frequency Range (MHz) | | | |
| 15.247(a)(2) | Bandwidth | >= 500KHz (6dB bandwidth) | 2400-2483.5 | PASS |

5.1.1 TEST PROCEDURE

- 1. Set RBW = 100 kHz.
- 2. Set the video bandwidth (VBW) \geq 3 x RBW.
- 3. Detector = Peak.
- 4. Trace mode = max hold.
- 5. Sweep = auto couple.
- Allow the trace to stabilize.
- 7. Measure the maximum width of the emission that is constrained by the frequencies associated with the two outermost amplitude points (upper and lower) that are attenuated by 6 dB relative to the maximum level measured in the fundamental emission.

5.1.2 DEVIATION FROM STANDARD

No deviation.

5.1.3 TEST SETUP



5.1.4 EUT OPERATION CONDITIONS

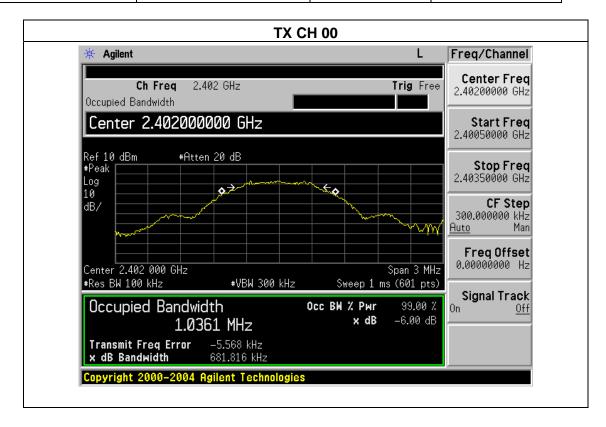
The EUT tested system was configured as the statements of 2.4 Unless otherwise a special operating condition is specified in the follows during the testing.



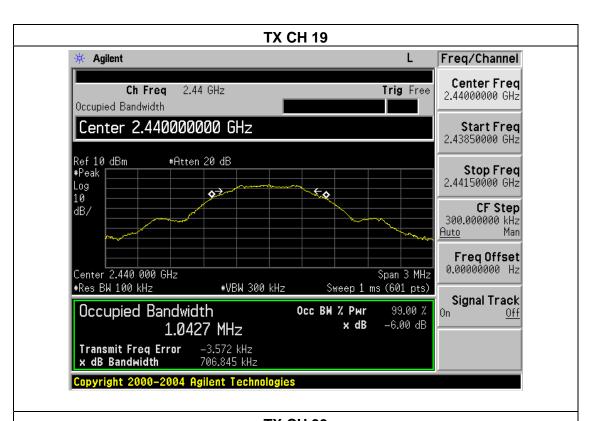
5.1.5 TEST RESULTS

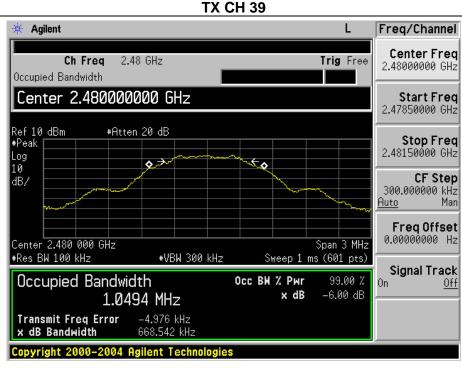
| EUT: | AvidCor | Model Name : | avidone |
|--------------|--------------------------|--------------------|---------|
| Temperature: | 25 ℃ | Relative Humidity: | 60% |
| Pressure : | 1012 hPa | Test Voltage : | DC3.0V |
| Test Mode : | TX Mode/CH00, CH19, CH39 | | |

| Frequency | 6dB Bandwidth (kHz) | Channel Separation (MHz) | Result |
|-----------|------------------------|--------------------------------|--------|
| 2402 MHz | 681.816 | >=500KHz | PASS |
| 2440 MHz | 706.845 | >=500KHz | PASS |
| 2480 MHz | 668.542 | >=500KHz | PASS |











6. PEAK OUTPUT POWER TEST

6.1 APPLIED PROCEDURES / LIMIT

| FCC Part15 (15.247) , Subpart C | | | | |
|---------------------------------|----------------------|-----------------|--------------------------|--------|
| Section | Test Item | Limit | Frequency Range (MHz) | Result |
| 15.247(b)(3) | Peak Output Power | 1 watt or 30dBm | 2400-2483.5 | PASS |

6.1.1 TEST PROCEDURE

a. The EUT was directly connected to spectrum analyzer

6.1.2 DEVIATION FROM STANDARD

No deviation.

6.1.3 TEST SETUP

| EUT | SPECTRUM |
|-----|----------|
| | ANALYZER |

6.1.4 EUT OPERATION CONDITIONS

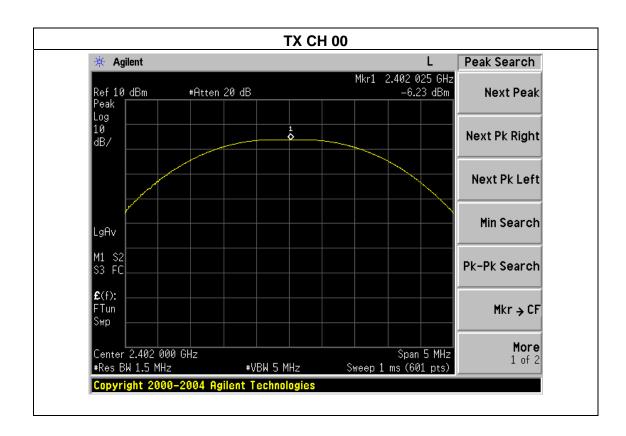
The EUT tested system was configured as the statements of 2.4 Unless otherwise a special operating condition is specified in the follows during the testing.



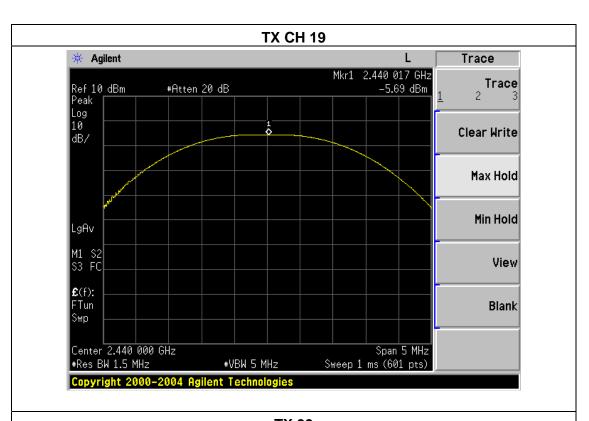
6.1.5 TEST RESULTS

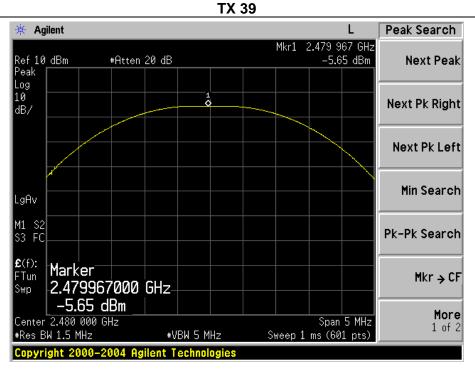
| EUT: | AvidCor | Model Name : | avidone |
|--------------|---------------------------|--------------------|---------|
| Temperature: | 25 ℃ | Relative Humidity: | 60% |
| Pressure : | 1012 hPa | Test Voltage : | DC3.0V |
| Test Mode : | TX Mode /CH00, CH19, CH39 | | |

| Test Channe | Frequency | Maximum Peak Conducted Output Power | LIMIT |
|----------------|-----------|-------------------------------------|-------|
| | (MHz) | (dBm) | dBm |
| CH00 | 2402 | -6.23 | 30 |
| CH19 | 2440 | -5.69 | 30 |
| CH39 | 2480 | -5.65 | 30 |











7. ANTENNA REQUIREMENT

7.1 STANDARD REQUIREMENT

15.203 requirement: For intentional device, according to 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.

7.2 EUT ANTENNA

The EUT antenna is a PCB antenna. It comply with the standard requirement.



8.CONDUCTED SPURIOUS EMISSIONS

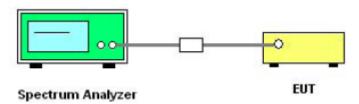
8.1 REQUIREMENT

According to FCC section 15.247(d), in any 100kHz 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 20dB below that in the 100kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement.

8.2 TEST PROCEDURE

According to FCC section 15.247(d), in any 100kHz 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 20dB below that in the 100kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement.

8.3 TEST SETUP



The EUT which is powered by the Battery, is coupled to the Spectrum Analyzer; the RF load attached to the EUT antenna terminal is 500hm; the path loss as the factor is calibrated to correct the reading. Make the measurement with the spectrum analyzer's resolution bandwidth(RBW) = 100 kHz. In order to make an accurate measurement, set the span greater than RBW.

8.4 EUT OPERATION CONDITIONS

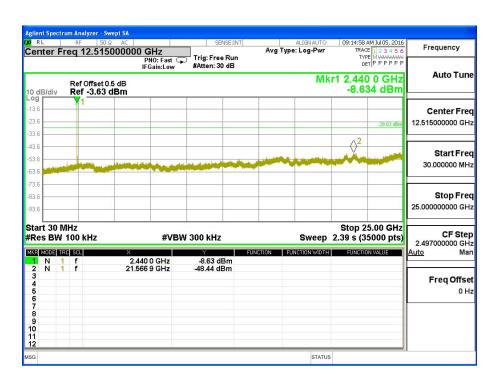
The EUT tested system was configured as the statements of 2.3 Unless otherwise a special operating condition is specified in the follows during the testing.

8.5 TEST RESULTS

CH0



CH 39





CH78





For Band Edge:

CH₀



CH78

