

Produkte Products

Client:

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Auftraggeber:

Able Trend Technology Limited Unit 217, 2/F, Building 12W, Phase 3

Hong Kong Science Park Shatin, Hong Kong

Gegenstand der Prüfung:

Test Item:

WiFi module

Bezeichnung:

AW6202

Serien-Nr.: Serial No.:

Engineering sample

Identification:

A000180084-001.

Eingangsdatum:

31.03.2015,

Wareneingangs-Nr.: Receipt No .:

A000180084-002

Date of Receipt:

09.04.2015

Prüfort:

TÜV Rheinland Hong Kong Ltd.

Testing Location:

8/F, First Group Centre, 14 Wang Tai Road, Kowloon Bay, Kowloon, Hong

Kona

Hong Kong Productivity Council

HKPC Building, 78 Tat Chee Avenue, Kowloon, Hong Kong

Zustand des Prüfgegenstandes bei Anlieferung:

Condition of test item at delivery:

Test samples are not damaged and suitable

for testing.

Prüfgrundlage: Test Specification: FCC Part 15 Subpart C

ANSI C63.4-2009

Prüfergebnis:

Test Results:

Das vorstehend beschriebene Gerät wurde geprüft und entspricht oben

genannter Prüfgrundlage.

The above mentioned product was tested and passed.

Prüflaboratorium:

TÜV Rheinland Hong Kong Ltd.

Testing Laboratory:

8 - 10/F., Goldin Financial Global Square, 7 Wang Tai Road, Kowloon Bay,

Kowloon, Hong Kong

geprüft/ tested by:

kontrolliert/ reviewed by:

22.04.2015

Benny Lau

Project Manager

22.04.2015

Sharon Li

Datum

Date

Name/Stellung Name/Position

Datum

Date

Department Manager Name/Stellung Name/Position

Unterschrift Signature

Sonstiges:

Other Aspects

FCC ID: 2AATFMA026WX

Unterschrift

Signature

Abkürzungen: P(ass) entspricht Prüfgrundlage

Abbreviations:

passed . failed

P(ass) F(ail)

not applicable

entspricht nicht Prüfgrundlage F(ail)

N/A nicht anwendbar

nicht getestet

N/A N/T not tested

Dieser Prüfbericht bezieht sich nur auf das o.g. Prüfmuster und darf ohne Genehmigung der Prüfstelle nicht auszugsweise vervielfältigt werden. Dieser Bericht berechtigt nicht zur Verwendung eines Prüfzeichens. This test report relates to the a. m. test sample. Without permission of the test center this test report is not permitted to be

duplicated in extracts. This test report does not entitle to carry any safety mark on this or similar products.



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Product information

Manufacturers declarations

| | Transceiver |
|---|----------------------------|
| Operating frequency range | 2412 - 2462 MHz |
| Type of modulation | DSSS, OFDM, MCS0-7 |
| Number of channels | 11 |
| Channel separation | 5 MHz |
| Type of antenna | Chip Antenna |
| Antenna gain (dBi) | 2.9 dBi |
| Power level | fix |
| Type of equipment | WIFI Module |
| Connection to public utility power line | No |
| Nominal voltage | V _{nor} : 3.3 Vdc |
| Independent Operation Modes | Transmitting mode |

Product function and intended use

The equipment under test (EUT) is a WIFI module using Texas Instruments CC3200 802.11b/g/n WIFI network processor. It is fully available for application development and rich peripheral interfaces to support a wide variety of network connectivity-based applications such as Internet of Things. It is operating from 2412MHz to 2462MHz, it supports 11 frequency channels and 20MHz bandwidth only. It uses integral chip antenna. This module could only be used in mobile or fix device which minimum separation distance between the radiator and the user or by-stander is 20cm. It is powered by 3.3VDC.

FCC ID: 2AATFMA016WX

| Models | Product description |
|--------|---------------------|
| AW6202 | WIFI module |

Submitted documents

Circuit Diagram Block Diagram Bill of material User manual Label

Independent Operation Modes

The basic operation modes are:

- WIFI transmit mode.

For further information refer to User Manual

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Related Submittal(s) Grants

This is a single application for certification of the single-modular transmitter.

Remark

Nil



Test Set-up and Operation Mode

Principle of Configuration Selection

Emission: The equipment under test (EUT) was configured to measure its highest possible radiation

level. The test modes were adapted accordingly in reference to the instructions for use.

Test Operation and Test Software

Test operation should refer to test methodology.

- Special software is provided by the grantee to set the device to operate in a fixed frequency channel and maximum RF output power level.
- Pre-scan has been conducted to determine the worst-case mode from all possible combinations between available modulations and data rate.

Special Accessories and Auxiliary Equipment

The product has been tested together with the following additional accessories:

- none

Supporting equipment:

- DC power supply model: Manson NP-9615 (provide by TUV)

Countermeasures to achieve EMC Compliance

- none

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Test Methodology

Radiated Emission

The radiated emission measurements were performed according to the procedures in ANSI C63.4-2009.

The equipment under test (EUT) was placed at the middle of the 80 cm height turntable, and the turntable is 3 meters far from the measuring antenna. During the testing, the EUT was operated standalone and arranged for maximum emissions. The EUT was tested in three orthogonal planes.

The investigation is performed with the EUT rotated 360°, the antenna height scanned between 1m and 4m, and the antenna rotated to repeat the measurements for both the horizontal and vertical antenna polarizations. Repeat the measurement steps until the maximum emissions were obtained.

All radiated tests were performed at an antenna to EUT with 3 meters distance, unless stated otherwise in particular parts of this test report.

Field Strength Calculation

The field strength at 3 m was established by adding the meter reading of the spectrum analyzer to the factors associated with antenna correction factor, cable loss, preamplifiers and filter attenuation.

The equation is expressed as follow:

FS = R + AF + CF + FA - PA

Where FS = Field Strength in dBuV/m at 3 meters.

R = Reading of Spectrum Analyzer in dBuV.

AF = Antenna Factor in dB.

CF = Cable Attenuation Factor in dB.

FA = Filter Attenuation Factor in dB.

PA = Preamplifier Factor in dB.

FA and PA are only be used for the measuring frequency above 1 GHz.



List of Test and Measurement Instruments

Hong Kong Productivity Council (Registration number: 90656)

Radiated Emission

| Equipment | Manufacturer | Туре | S/N | Due Date |
|---|--------------|--------------|---------------|-----------|
| Semi-anechoic Chamber | Frankonia | Nil | Nil | 14-May-15 |
| New Fully Ancheonic | | | | |
| Chamber | TDK | N/A | N/A | 15-May-15 |
| Cable | Hubersuhner | SUCOFLEX 104 | 72799 /6 | 31-Mar-16 |
| Test Receiver | R&S | ESU40 | 100190 | 20-Jun-15 |
| Bi-conical Antenna | R&S | HK116 | 100241 | 11-Jun-15 |
| Log Periodic Antenna | R&S | HL223 | 841516/017 | 10-Jun-15 |
| | | RTK081-05S- | LA2-001-10M / | |
| Coaxial cable 50ohm | Rosenberger | 05S-10m | 001 | 10-Jun-16 |
| Microwave amplifer 0.5- 26.5GHz, 25dB gain | HP | 83017A | 3123A00437 | 30-Dec-15 |
| High Pass Filter (cutoff freq. =1000MHz) | Trilithic | 23042 | 9829213 | 28-Oct-15 |
| Horn Antenna | EMCO | 3115 | 9002-3347 | 11-Jun-15 |
| Active Loop Antenna | EMCO | 6502 | 9107-2651 | 17-May-15 |

AC Mains Conducted Emission

| Equipment | Manufacturer | Туре | S/N | Due Date |
|---------------|--------------|--------|--------|-----------|
| Test Receiver | R&S | ESR3 | 101833 | 12 Sep 15 |
| LISN | R&S | ENV216 | 100273 | 05 Feb 16 |
| EMC32 | R&S | v9.12 | N/A | N/A |

TÜV Rheinland Hong Kong Ltd

Radio Test

| Equipment | Manufacturer | Туре | S/N | Due Date |
|-------------------|--|----------|---------------|-----------|
| Spectrum Analyzer | R&S | FSP30 | 100007 | 12-Jan-17 |
| Power meter | Dijkstra Advice, Research & EMC Instruments B.V. | RPR3006W | 13I00030SN079 | 11-Jun-15 |

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Results FCC Part 15 - Subpart C

FCC 15.203 - Antenna Requirement 1

Pass

FCC Requirement: No antenna other than that furnished by the responsible party shall be used with the

device

Results: a) Antenna type: Fixed Integral chip antenna

b) Manufacturer and model no: Mitsubishi AM03DP-ST01

c) Peak Gain: 2.9 dBi

Verdict: Pass

FCC 15.204 - Antenna Requirement 2

N/A

FCC Requirement: Provide information for every antenna proposed for the use with the EUT

Results: Only one integral antenna can be used.

Verdict: N/A

FCC 15.207 - Conducted Emission on AC Mains

Pass

Test Specification: ANSI C63.4 - 2009

Mode of operation: TX mode of 802.11b, 802.11g, 802.11n
Port of testing: AC Mains input port of power supply

Detector : Quasi-peak and Average

RBW : 9 kHz

Supply voltage : 120Vac 60Hz

Temperature : 23°C Humidity : 50%

Requirement: 15.207(a)

Results: Pass

Live measurement

| Frequency range (MHz) | Frequency (MHz) | Quasi-peak dBμV | Average dBμV | Limit QP (dBµV) | Limit AV (dBµV) | Verdict |
|-----------------------------|--------------------|--------------------|-----------------|--------------------|--------------------|---------|
| 0,15 - 0,5 | No peak found | | | 66 - 56 | 56 - 46 | Pass |
| > 0,5 - 5 | No peak found | | | 56 | 46 | Pass |
| > 5 - 30 | No peak found | | | 60 | 50 | Pass |

Neutral measurement

| Frequency range (MHz) | Frequency (MHz) | Quasi-peak dB _µ V | Average dBμV | Limit QP (dBµV) | Limit AV (dBµV) | Verdict |
|-----------------------------|--------------------|---------------------------------|-----------------|--------------------|--------------------|---------|
| 0,15 - 0,5 | No peak found | | | 66 - 56 | 56 - 46 | Pass |
| > 0,5 - 5 | No peak found | | | 56 | 46 | Pass |
| > 5 - 30 | No peak found | | | 60 | 50 | Pass |

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Results: Pre-scan has been conducted to determine the worst-case mode from all possible

combinations between available modulations and data rate.

The radio frequency voltage that is conducted back onto the AC power line on any frequency or frequencies within the band 150kHz to 30MHz does not exceed the limits. For test Results plots refer to Appendix 1, page 2-4.

FCC 15.247 (a)(2) - 6dB Bandwidth Measurement

Pass

FCC Requirement: Systems using digital modulation techniques may operate in the 902 – 928 MHz, 2400 –

2483.5 MHz, and 5725 - 5850 MHz bands. The minimum 6dB bandwidth shall be at

least 500kHz.

IC Requirement: The minimum -6 dB bandwidth shall be at least 500 kHz.

Test Specification: KDB 558074 D01 DTS Measurement Guidance v03r02 section 8.1 Option 1

Mode of operation: TX mode

Port of testing : Temporary antenna port

Detector : Peak

RBW/VBW : 100KHz/ 300KHz

Supply voltage : 3.3Vdc Temperature : 23°C Humidity : 50%

Results: For test protocols please refer to Appendix 1, page 5-9.

802.11b

| Channel frequency (MHz) | 6 dB left (MHz) | 6 dB right (MHz) | 6dB bandwidth (MHz) |
|----------------------------|--------------------|---------------------|------------------------|
| 2412 | 2406.84 | 2416.96 | 10.12 |
| 2437 | 2431.88 | 2441.96 | 10.08 |
| 2462 | 2456.88 | 2466.92 | 10.04 |

802.11g

| Channel frequency (MHz) | 6 dB left (MHz) | 6 dB right (MHz) | 6dB bandwidth (MHz) |
|----------------------------|--------------------|---------------------|------------------------|
| 2412 | 2404.36 | 2419.52 | 15.16 |
| 2437 | 2429.32 | 2444.52 | 15.20 |
| 2462 | 2454.36 | 2469.52 | 15.16 |

802.11n

| Channel frequency | 6 dB left | 6 dB right | 6dB bandwidth |
|-------------------|-----------|------------|---------------|
| (MHz) | (MHz) | (MHz) | (MHz) |
| 2412 | 2404.36 | 2419.48 | 15.12 |
| 2437 | 2429.32 | 2444.52 | 15.20 |
| 2462 | 2454.36 | 2469.52 | 15.16 |

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FCC 15.247(b)(3) - Maximum Peak Couducted Output Power

Pass

FCC Requirement: For systems using digital modulation in the 902-928 MHz, 2400-2483.5 MHz, and 5725-

5850MHz bands: 1 Watt (30dBm)

Test Specification: KDB 558074 D01 DTS Measurement Guidance v03r02 section 9.2

Mode of operation: TX mode

Port of testing : Temporary antenna port

Detector : Peak Supply voltage : 3.3Vdc Temperature : 23°C Humidity : 50%

802.11b

| Frequency (MHz) | Maximum peak output power (dBm) | Cable attenuation (dB) | Output power (dBm) | Limit (W/dBm) | Verdict |
|--------------------|--|------------------------------|-----------------------|------------------|---------|
| 2412 | 14.7 | 0.5 | 15.2 | 1 / 30.0 | Pass |
| 2437 | 14.2 | 0.5 | 14.7 | 1 / 30.0 | Pass |
| 2462 | 14.1 | 0.5 | 14.6 | 1 / 30.0 | Pass |

802.11g

| Frequency (MHz) | Maximum peak output power (dBm) | Cable attenuation (dB) | Output power (dBm) | Limit (W/dBm) | Verdict |
|--------------------|--|------------------------------|-----------------------|------------------|---------|
| 2412 | 14.5 | 0.5 | 15.0 | 1 / 30.0 | Pass |
| 2437 | 16.0 | 0.5 | 16.5 | 1 / 30.0 | Pass |
| 2462 | 16.1 | 0.5 | 16.6 | 1 / 30.0 | Pass |

802.11n

| Frequency (MHz) | Maximum peak output power (dBm) | Cable attenuation (dB) | Output power (dBm) | Limit (W/dBm) | Verdict |
|--------------------|--|------------------------------|-----------------------|------------------|---------|
| 2412 | 14.5 | 0.5 | 15.0 | 1 / 30.0 | Pass |
| 2437 | 15.7 | 0.5 | 16.2 | 1 / 30.0 | Pass |
| 2462 | 15.8 | 0.5 | 16.3 | 1 / 30.0 | Pass |

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FCC 15.247(e) - Power Spectral Density

Pass

FCC Requirement: For digitally modulated systems, the power spectral density conducted from the

intentional radiator to the antenna shall not be greater than 8 dBm in any 3 kHz band

during any time interval of continuous transmission.

Test Specification: KDB 558074 D01 DTS Measurement Guidance v03r02 section 10.2

Mode of operation: TX mode

Port of testing : Temporary antenna port

Detector : Peak

RBW/VBW : $\geq 100 \text{ KHz} / \geq 3x\text{RBW}$ span : $\geq 1.5 \text{ x DTS BW}$

Supply voltage : 3.3Vdc Temperature : 23°C Humidity : 50%

Results: For test protocols please refer to Appendix 1, page 10-14.

802.11b

| Operating frequency (MHz) | Power density (dBm) | Limit (dBm) | Verdict |
|---------------------------|------------------------|----------------|---------|
| 2412 | 3.63 | 8.0 | Pass |
| 2437 | 4.73 | 8.0 | Pass |
| 2462 | 3.89 | 8.0 | Pass |

802.11g

| <u> </u> | | | | |
|------------------------------|--|--|--|--|
| Operating frequency (MHz) | Power density (dBm) | Limit (dBm) | Verdict | |
| 2412 | -0.35 | 8.0 | Pass | |
| 2437 | 2.23 | 8.0 | Pass | |
| 2462 | -0.69 | 8.0 | Pass | |
| | Operating frequency (MHz) 2412 2437 | Operating frequency (MHz) Power density (dBm) 2412 -0.35 2437 2.23 | Operating frequency (MHz) Power density (dBm) Limit (dBm) 2412 -0.35 8.0 2437 2.23 8.0 | |

802.11n

| Operating frequency (MHz) | Power density (dBm) | Limit (dBm) | Verdict |
|------------------------------|------------------------|----------------|---------|
| 2412 | -0.94 | 8.0 | Pass |
| 2437 | 0.59 | 8.0 | Pass |
| 2462 | -1.09 | 8.0 | Pass |

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FCC 15.247(d) - Spurious Conducted Emissions

Pass

Test Specification: KDB 558074 D01 DTS Measurement Guidance v03r02 section 11.1

Mode of operation: TX mode

Port of testing : Temporary antenna port

Detector : Peak

RBW/VBW : 100 kHz / 300 kHz

Supply voltage : 3.3Vdc Temperature : 23 °C Humidity : 50 %

FCC Requirement: 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.

Results: Pre-scan has been conducted to determine the worst-case mode from all possible

combinations between available modulations and data rate.

Only the worst cases is shown below. For test protocols refer to Appendix 1, page 15-

41.

802.11b

| Operating frequency (MHz) | Spurious frequency (MHz) | Spurious Level (dBm) | Reference value (dBm) | Delta (dB) | Verdict |
|---------------------------|--------------------------------|-------------------------|-----------------------|---------------|---------|
| 2412 | 674.326 | -42.62 | 3.63 | -46.25 | Pass |
| 2437 | 700.300 | -43.08 | 4.73 | -47.81 | Pass |
| 2462 | 724.276 | -46.90 | 3.89 | -50.79 | Pass |

802.11g

| Operating frequency (MHz) | Spurious frequency (MHz) | Spurious Level (dBm) | Reference value (dBm) | Delta (dB) | Verdict |
|---------------------------|--------------------------------|-------------------------|-----------------------|---------------|---------|
| 2412 | 674.326 | -51.85 | -0.35 | -51.50 | Pass |
| 2437 | 700.300 | -48.36 | 2.23 | -50.59 | Pass |
| 2462 | 724.276 | -56.51 | -0.69 | -55.82 | Pass |

802.11n

| Operating frequency (MHz) | Spurious frequency (MHz) | Spurious Level (dBm) | Reference value (dBm) | Delta (dB) | Verdict |
|---------------------------|--------------------------------|-------------------------|-----------------------|---------------|---------|
| 2412 | 674.326 | -54.52 | -0.94 | -53.58 | Pass |
| 2437 | 698.302 | -50.59 | 0.59 | -51.18 | Pass |
| 2462 | 722.278 | -57.33 | -1.09 | -56.24 | Pass |

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FCC 15.247 (d) - Band edge compliance of conducted emissions

Pass

Test Specification: KDB 558074 D01 DTS Measurement Guidance v03r02

Mode of operation: Tx mode

Port of testing : Temporary antenna port

Detector : Peak

RBW/VBW : 100 kHz / 300 kHz

Supply voltage : 3.3Vdc Temperature : 23°C Humidity : 50%

FCC Requirement: 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.

Results: Pre-scan has been conducted to determine the worst-case mode from all possible

combinations between available modulations and data rate.

For test protocols refer to Appendix 1, page 42-44.

802.11b

| Operating frequency (MHz) | Band-edge frequency (MHz) | Spurious Level (dBm) | Reference value (dBm) | Delta (dB) | Verdict |
|---------------------------|---------------------------------|-------------------------|-----------------------|---------------|---------|
| 2412 | 2400.0 | -38.76 | 3.63 | -42.39 | Pass |
| 2462 | 2483.5 | -46.24 | 3.89 | -50.13 | Pass |

802.11g

| Operating frequency (MHz) | Spurious frequency (MHz) | Spurious Level (dBm) | Reference value (dBm) | Delta (dB) | Verdict |
|---------------------------|--------------------------------|-------------------------|-----------------------|---------------|---------|
| 2412 | 2400.0 | -30.31 | -0.35 | -29.96 | Pass |
| 2462 | 2483.5 | -44.57 | -0.69 | -43.88 | Pass |

802.11n

| Operating frequency (MHz) | Spurious frequency (MHz) | Spurious Level (dBm) | Reference value (dBm) | Delta (dB) | Verdict |
|---------------------------|--------------------------------|-------------------------|-----------------------|---------------|---------|
| 2412 | 2400.0 | -32.64 | -0.94 | -31.70 | Pass |
| 2462 | 2483.5 | -45.27 | -1.09 | -44.18 | Pass |

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| Test Specification: | ANSI C63.4 - | 2009 | | | |
|---|--|--|--------------------------------------|--|--|
| Mode of operation: | | | | | |
| Port of testing : | | | | | |
| | Peak | | | | |
| RBW/VBW : | 100 kHz / 300 kHz for f < 1 GHz | | | | |
| Supply voltage : | 1 MHz / 3 MHz for f > 1 GHz Error! Reference source not found. from DC power supply | | | | |
| Temperature : Humidity : | 23°C 50% | | | | |
| FCC Requirement: | level of the des bands, as defin | bandwidth outside the frequency barsired power. In addition, radiated emined in section15.205(a), must also colin section 15.205(c). | issions which fall in the restricted | | |
| Results: | | peen conducted to determine the wor between available modulations and d | | | |
| | | mit frequency modes comply with the s no spurious found below 30MHz. | field strength within the restricted | | |
| Mode: 802.11b 2412 | 2MHz TX | Vertical Polarization | | | |
| Freq MHz | | Level dBuV/m | Limit/ Detector dBuV/m | | |
| 2390.00 | 00 | 54.70 | 74.0 / PK | | |
| 2390.000 | | 42.21 | 54.0 / AV | | |
| 4020.897 | | 59.11 | 74.0 / PK | | |
| 4020.897 | | 52.49* | 54.0 / AV | | |
| Mode: 802.11b 2412 | 2MHz TX | Horizontal Polarization | | | |
| Freq | | Level | Limit/ Detector | | |
| MHz | | dBuV/m | dBuV/m | | |
| 2390.00 | | 55.17 | 74.0 / PK | | |
| 2390.000 | | 43.59 | 54.0 / AV | | |
| 4020.08 4020.08 | | 59.06 52.47* | 74.0 / PK 54.0 / AV | | |
| Mode: 802.11b 2437 | | Vertical Polarization | 04.07 AV | | |
| Freq | | Level | Limit/ Detector | | |
| MHz | | dBuV/m 59.40 | dBuV/m 74.0 / PK | | |
| 4061.955 4061.955 | | 52.59* | 54.0 / AV | | |
| | | Horizontal Polarization | 307711 | | |
| 4061.98 Mode: 802.11b 2437 | 7MHz TX | | | | |
| 4061.95 Mode: 802.11b 2437 | 7MHz TX | Level | Limit/ Detector | | |
| 4061.95 | 7MHz TX | | Limit/ Detector dBuV/m | | |
| 4061.95 Mode: 802.11b 2437 Freq | | Level | | | |
| 4061.95 Mode: 802.11b 2437 Freq MHz | 54 | Level dBuV/m | dBuV/m | | |
| 4061.98 Mode: 802.11b 2437 Freq MHz 4061.18 | 54 53 | Level dBuV/m 60.25 | dBuV/m 74.0 / PK | | |

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| dBuV/m | dBuV/m |
|-------------------------|--|
| 54.05 | 74.0 / PK |
| 43.36 | 54.0 / AV |
| 60.81 | 74.0 / PK |
| 53.96* | 54.0 / AV |
| Horizontal Polarization | |
| Level | Limit/ Detector |
| dBuV/m | dBuV/m |
| 58.12 | 74.0 / PK |
| 48.88 | 54.0 / AV |
| 59.09 | 74.0 / PK |
| 52.30* | 54.0 / AV |
| Vertical Polarization | |
| Level | Limit/ Detector |
| dBuV/m | dBuV/m |
| 58.76 | 74.0 / PK |
| 41.33 | 54.0 / AV |
| 59.47 | 74.0 / PK |
| 48.00 | 54.0 / AV |
| Horizontal Polarization | |
| Level | Limit/ Detector |
| | dBuV/m |
| | 74.0 / PK |
| | 54.0 / AV |
| | 74.0 / PK |
| | 54.0 / AV |
| Vertical Polarization | |
| Level | Limit/ Detector |
| dBuV/m | dBuV/m |
| 59.67 | 74.0 / PK |
| 47.26 | 54.0 / AV |
| Horizontal Polarization | |
| Level | Limit/ Detector |
| dBuV/m | dBuV/m |
| 60.38 | 74.0 / PK |
| 47.98 | 54.0 / AV |
| Vertical Polarization | |
| Level | Limit/ Detector |
| dBuV/m | dBuV/m |
| | 74.0 / PK |
| 50.13 | 54.0 / AV |
| 59.69 | |
| 47.85 | |
| Horizontal Polarization | |
| Level | Limit/ Detector |
| | |
| | |
| dBuV/m 66.25 | dBuV/m 74.0 / PK |
| | 54.05 43.36 60.81 53.96* Horizontal Polarization Level dBuV/m 58.12 48.88 59.09 52.30* Vertical Polarization Level dBuV/m 58.76 41.33 59.47 48.00 Horizontal Polarization Level dBuV/m 65.35 47.18 59.19 47.36 Vertical Polarization Level dBuV/m 65.35 47.18 59.19 47.36 Vertical Polarization Level dBuV/m 60.38 47.26 Horizontal Polarization Level dBuV/m 60.38 47.98 Vertical Polarization Level dBuV/m 60.38 47.98 Vertical Polarization Level dBuV/m 60.38 47.98 Vertical Polarization |

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| 4103.478 | 57.98 | 74.0 / PK |
|--------------------------|-------------------------|-----------------|
| 4103.478 | 46.34 | 54.0 / AV |
| Mode: 802.11n 2412MHz TX | Vertical Polarization | |
| Freq | Level | Limit/ Detector |
| MHz | dBuV/m | dBuV/m |
| 2390.000 | 59.65 | 74.0 / PK |
| 2390.000 | 41.85 | 54.0 / AV |
| 4021.410 | 57.02 | 74.0 / PK |
| | 45.45 | 54.0 / AV |
| Mode: 802.11n 2412MHz TX | Horizontal Polarization | |
| Freq | Level | Limit/ Detector |
| MHz | dBuV/m | dBuV/m |
| 2390.000 | 67.21 | 74.0 / PK |
| 2390.000 | 47.45 | 54.0 / AV |
| 4019.679 | 58.40 | 74.0 / PK |
| | 47.06 | 54.0 / AV |
| Mode: 802.11n 2437MHz TX | Vertical Polarization | |
| Freq | Level | Limit/ Detector |
| MHz | dBuV/m | dBuV/m |
| 4061.731 | 58.84 | 74.0 / PK |
| 4061.731 | 47.19 | 54.0 / AV |
| Mode: 802.11n 2437MHz TX | Horizontal Polarization | • |
| Freq | Level | Limit/ Detector |
| MHz | dBuV/m | dBuV/m |
| 4061.827 | 61.03 | 74.0 / PK |
| 4061.827 | 49.05 | 54.0 / AV |
| Mode: 802.11n 2462MHz TX | Vertical Polarization | |
| Freq | Level | Limit/ Detector |
| MHz | dBuV/m | dBuV/m |
| 2483.500 | 61.70 | 74.0 / PK |
| 2483.500 | 44.87 | 54.0 / AV |
| 4103.317 | 58.75 | 74.0 / PK |
| 4103.317 | 46.84 | 54.0 / AV |
| Mode: 802.11n 2462MHz TX | Horizontal Polarization | |
| Freq | Level | Limit/ Detector |
| MHz | dBuV/m | dBuV/m |
| 2483.500 | 71.49 | 74.0 / PK |
| 2483.500 | 49.10 | 54.0 / AV |
| 4103.077 | 58.35 | 74.0 / PK |
| 4103.077 | 46.13 | 54.0 / AV |

Remark(*) Marginal Pass