

TEST REPORT

Application No.: SUCR2505000487AT
Applicant: Shanghai Sunmi Technology Co.,Ltd.
Address of Applicant: Room 505,No.388,Song Hu Road,Yang Pu District,Shanghai,China
Manufacturer: Shanghai Sunmi Technology Co.,Ltd.
Address of Manufacturer: Room 505,No.388,Song Hu Road,Yang Pu District,Shanghai,China
EUT Description: Smart POS System
Model No.: T670B
Trade Mark: SUNMI
FCC ID: 2AH25T670B
Standards: FCC 47 CFR Part 15, Subpart C 15.225
Date of Receipt: May 28, 2025
Date of Test: July 1, 2025 to July 4, 2025
Date of Issue: July 8, 2025

| | |
|----------------------|---------------|
| Test Result : | PASS * |
|----------------------|---------------|

* In the configuration tested, the EUT detailed in this report complied with the standards specified above.

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Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 30 days only.

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Version

| <i>Revision Record</i> | | | |
|------------------------|--------------------|--------------|---------------|
| <i>Version</i> | <i>Description</i> | <i>Date</i> | <i>Remark</i> |
| 01 | Original | July 8, 2025 | / |
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|---------------------------------|--|---|--|
| Authorized for issue by: | | | |
| Tested By | |  Hayley Zhang | |
| | | <hr/> Hayley Zhang / Project Manager | |
| Approved By | |  Cloud Peng | |
| | | <hr/> Cloud Peng/Technical Manager | |

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1 Test Summary

| Test Item | FCC Rules No. | Test Method | Test Result | Result |
|--|------------------|----------------------------------|-------------|--------|
| Antenna Requirement | 15.203 | -- | Clause 3.1 | PASS |
| AC Power Line Conducted Emission | 15.207 | ANSI C63.10 2013 Section 6.2 | Clause 3.3 | PASS |
| 20dB Spectrum Bandwidth & 99% Occupied Bandwidth | 15.215(c) | ANSI C63.10 2013 Section 6.9.3 | Clause 3.4 | PASS |
| Frequency Stability | 15.225(e) | ANSI C63.10 2013 Section 6.8 | Clause 3.5 | PASS |
| Field Strength of Fundamental Emissions | 15.225(a)(b)(c) | ANSI C63.10 2013 Section 6.4.7 | Clause 3.6 | PASS |
| Radiated Spurious Emissions | 15.225(d)/15.209 | ANSI C63.10 2013 Section 6.4/6.5 | Clause 3.7 | PASS |

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2 General Information

2.1 Details of Client

| | |
|--------------------------|--|
| Applicant: | Shanghai Sunmi Technology Co.,Ltd. |
| Address of Applicant: | Room 505,No.388,Song Hu Road,Yang Pu District,Shanghai,China |
| Manufacturer: | Shanghai Sunmi Technology Co.,Ltd. |
| Address of Manufacturer: | Room 505,No.388,Song Hu Road,Yang Pu District,Shanghai,China |

2.2 Test Location

| | |
|----------------|--|
| Company: | SGS-CSTC Standards Technical Services (Suzhou) Co., Ltd. |
| Address: | South of No. 6 Plant, No. 1, Runsheng Road, Suzhou Industrial Park, Suzhou Area, China (Jiangsu) Pilot Free Trade Zone |
| Post code: | 215000 |
| Test engineer: | King-p Li |

2.3 Test Facility

The test facility is recognized, certified, or accredited by the following organizations:

• **A2LA (Certificate No. 6336.01)**

SGS-CSTC STANDARDS TECHNICAL SERVICES (SUZHOU) CO., LTD. is accredited by the American Association for Laboratory Accreditation(A2LA). Certificate No. 6336.01.

• **Innovation, Science and Economic Development Canada**

SGS-CSTC STANDARDS TECHNICAL SERVICES (SUZHOU) CO., LTD. has been recognized by ISED as an accredited testing laboratory.

CAB identifier: CN0120.

IC#: 27594.

• **FCC –Designation Number: CN1312**

SGS-CSTC STANDARDS TECHNICAL SERVICES (SUZHOU) CO., LTD. has been recognized as an accredited testing laboratory.

Designation Number: CN1312.

Test Firm Registration Number: 717327

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2.4 General Description of EUT

| | |
|----------------------|---|
| Hardware Version: | V1.1 |
| Software Version: | 4.1.0 |
| Power Supply: | 3.87V from battery |
| Operation Frequency: | 13.56MHz |
| Modulation Type: | ASK |
| Antenna Type: | Internal Antenna |
| Remark: | <p>1. As above information is provided and confirmed by the applicant. SGS is not liable to the accuracy, suitability, reliability or/and integrity of the information.</p> <p>2. The three SKUs only differ in the connection port between the backplane and the base, which does not affect RF performance. We used SKU3 for testing.</p> |

2.5 Test Environment

| Environment Parameter | 101 kPa Selected Values During Tests | |
|-----------------------|--------------------------------------|------------|
| Relative Humidity | 44-46 % RH Ambient | |
| Value | Temperature(°C) | Voltage(V) |
| NTNV | 22~23 | 3.87 |

Remark: The extreme Voltage and extreme Temperature are refer to the test data of Frequency Stability.

2.6 Description of Support Units

The EUT has been tested as an independent unit.

3 Equipment List

| RF Test Equipment | | | | | |
|-------------------------------------|---------------|----------------------------------|---------------|------------------------|---------------------------|
| Test Equipment | Manufacturer | Model No. | Inventory No. | Cal. date (yyyy/mm/dd) | Cal.Due date (yyyy/mm/dd) |
| Shielding Room | Brilliant-emc | N/A | SUWI-04-08-01 | 2022/11/09 | 2025/11/08 |
| Temperature and humidity meter | MingGao | TH101B | SUWI-01-01-07 | 2025/02/13 | 2026/02/12 |
| Measurement Software | Tonscend | TST272 V2.0 | SUWI-03-55-03 | NCR | NCR |
| Signal Analyzer | ROHDE&SCHWARZ | FSW43 | SUWI-01-02-04 | 2025/01/20 | 2026/01/19 |
| Temperature Chamber | ESPEC | SU-242 | SUWI-01-13-02 | 2025/05/07 | 2026/05/06 |
| Wideband Radio Communication Tester | ROHDE&SCHWARZ | CMW500 | SUWI-01-16-05 | 2025/01/21 | 2026/01/20 |
| DC Power Supply | HYELEC | HY3005B | SUWI-01-18-01 | 2025/01/15 | 2026/01/14 |
| Power meter | Anritsu | ML2495A | SUWI-01-31-01 | 2024/11/19 | 2025/11/18 |
| Pulse power sensor | Anritsu | MA2411B | SUWI-01-32-01 | 2024/11/19 | 2025/11/18 |
| MXG Vector signal generator | KEYSIGHT | N5182B | SUWI-01-38-01 | 2025/01/15 | 2026/01/14 |
| Router | ASUS | GT-AXE11000(FCC ID MSQ-RTAXJF00) | SUWI-03-14-02 | NCR | NCR |
| Signal Analyzer | KEYSIGHT | N9020A | SUWI-01-02-07 | 2024/11/19 | 2025/11/18 |

| CE Test System | | | | | |
|---------------------------------|---------------|-----------------|---------------|------------------------|---------------------------|
| Test Equipment | Manufacturer | Model No. | Inventory No. | Cal. date (yyyy/mm/dd) | Cal.Due date (yyyy/mm/dd) |
| Test receiver | ROHDE&SCHWARZ | ESR7 | SUWI-01-10-01 | 2025/01/15 | 2026/01/14 |
| Temperature and humidity meter* | MingGao | TH101B | SUWI-01-01-06 | 2025/02/13 | 2026/02/12 |
| Artificial network | ROHDE&SCHWARZ | ENV216 | SUWI-01-19-03 | 2025/05/08 | 2026/05/07 |
| Artificial network | ROHDE&SCHWARZ | ENV216 | SUWI-01-19-04 | 2025/05/08 | 2026/05/07 |
| Measurement Software | Tonscend | JS32-CE 4.0.0.2 | SUWI-02-09-05 | NCR | NCR |

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| 9*6*6 Test Equipment | | | | | |
|--------------------------------|----------------------------|------------------|---------------|------------------------|---------------------------|
| Test Equipment | Manufacturer | Model No. | Inventory No. | Cal. date (yyyy/mm/dd) | Cal.Due date (yyyy/mm/dd) |
| Semi-Anechoic Chamber | Brilliant-emc | N/A | SUWI-04-02-01 | 2023/06/03 | 2026/06/02 |
| Temperature and humidity meter | MingGao | TH101B | SUWI-01-01-05 | 2025/02/13 | 2026/02/12 |
| Signal Analyzer | ROHDE &SCHWARZ | FSW43 | SUWI-01-02-04 | 2025/01/20 | 2026/01/19 |
| Signal Analyzer | KEYSIGHT | N9020A | SUWI-01-02-07 | 2024/11/21 | 2025/11/20 |
| Test receiver | ROHDE &SCHWARZ | ESR7 | SUWI-01-10-01 | 2025/01/15 | 2026/01/14 |
| Receiving antenna | SCHWRZBECK MESS-ELEKTRONIK | VULB 9168 | SUWI-01-11-04 | 2023/11/25 | 2025/11/24 |
| Receiving antenna | SCHWRZBECK MESS-ELEKTRONIK | BBHA 9120D | SUWI-01-11-02 | 2025/05/07 | 2027/05/06 |
| Receiving antenna | SCHWRZBECK MESS-ELEKTRONIK | BBHA 9170 | SUWI-01-11-03 | 2025/05/07 | 2027/05/06 |
| Active Loop Antenna | SCHWRZBECK MESS-ELEKTRONIK | FMZB 1519B | SUWI-01-21-01 | 2023/06/03 | 2026/06/02 |
| Amplifier | Tonscend | TAP9K3G40 | SUWI-01-14-01 | 2025/05/07 | 2027/05/06 |
| Amplifier | Tonscend | TAP01018050 | SUWI-01-14-02 | 2025/01/16 | 2026/01/15 |
| Amplifier | Tonscend | TAP18040048 | SUWI-01-14-03 | 2025/01/16 | 2026/01/15 |
| Measurement Software | Tonscend | JS32-RE V4.0.0.0 | SUWI-02-09-04 | NCR | NCR |

Remark: NCR=No Calibration Requirement.

4 Measurement Uncertainty (95% confidence levels, k=2)

| No. | Item | Measurement Uncertainty |
|-----|---------------------|--|
| 1 | Radio Frequency | ±1.0 % |
| 2 | Occupied Bandwidth | ±1.0 % |
| 3 | Conduction Emission | ± 2.90dB (150kHz to 30MHz) |
| 4 | Radiated Emission | ± 3.13dB (9k -30MHz) ± 4.80dB (30M -1GHz) |

Remark:

The U_{lab} (lab Uncertainty) is less than $U_{cispres/ETSI}$ (CISPR/ETSI Uncertainty), so the test results

- compliance is deemed to occur if no measured disturbance level exceeds the disturbance limit;
- non-compliance is deemed to occur if any measured disturbance level exceeds the disturbance limit.

5 Test results and Measurement Data

5.1 Antenna Requirement

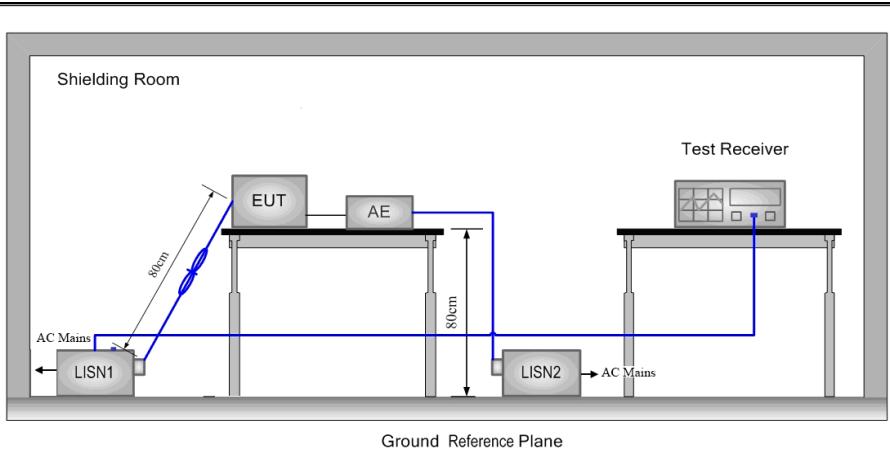
| Standard requirement: | 47 CFR Part 15C Section 15.203 |
|-----------------------|---|
| 15.203 requirement: | An intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator shall be considered sufficient to comply with the provisions of this section. The manufacturer may design the unit so that a broken antenna can be replaced by the user, but the use of a standard antenna jack or electrical connector is prohibited. |
| | The antenna of the EUT are permanently attached. |

5.2 Worst-case configuration and mode

The fundamental of the EUT was investigated under three orthogonal orientations X, Y, and Z. The X orientation was determined to be the worst-case orientation.

Although these tests were performed than open area test site, adequate comparison measurements were confirmed against 30m open are test site. Therefore sufficient tests were made to demonstrate that the alternative site produces results that correlate with the ones of tests made in an open field based on KDB 414788.

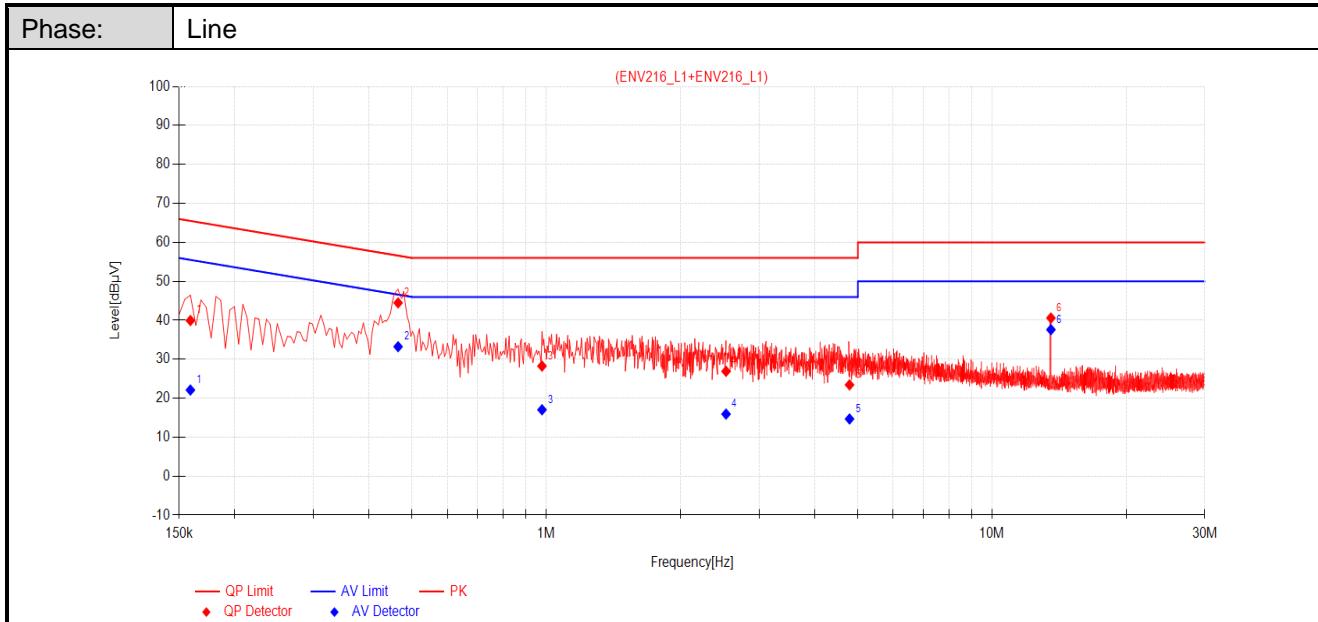
5.3 AC Power Line Conducted Emissions

| | | | |
|--|---|-----------|--------------|
| Test Requirement: | 47 CFR Part 15C Section 15.207 | | |
| Test Method: | ANSI C63.10: 2013 | | |
| Test Frequency Range: | 150kHz to 30MHz | | |
| Limit: | Frequency range(MHz) | | Limit (dBuV) |
| | | | Quasi-peak |
| | 0.15-0.5 | 66 to 56* | 56 to 46* |
| | 0.5-5 | 56 | 46 |
| | 5-30 | 60 | 50 |
| * Decreases with the logarithm of the frequency. | | | |
| Test Procedure: | <ol style="list-style-type: none"> 1) The mains terminal disturbance voltage test was conducted in a shielded room. 2) The EUT was connected to AC power source through a LISN 1 (Line Impedance Stabilization Network) which provides a $50\Omega/50\mu\text{H} + 5\Omega$ linear impedance. The power cables of all other units of the EUT were connected to a second LISN 2, which was bonded to the ground reference plane in the same way as the LISN 1 for the unit being measured. A multiple socket outlet strip was used to connect multiple power cables to a single LISN provided the rating of the LISN was not exceeded. 3) The tabletop EUT was placed upon a non-metallic table 0.8m above the ground reference plane. And for floor-standing arrangement, the EUT was placed on the horizontal ground reference plane. 4) The test was performed with a vertical ground reference plane. The rear of the EUT shall be 0.4 m from the vertical ground reference plane. The vertical ground reference plane was bonded to the horizontal ground reference plane. The LISN 1 was placed 0.8 m from the boundary of the unit under test and bonded to a ground reference plane for LISNs mounted on top of the ground reference plane. This distance was between the closest points of the LISN 1 and the EUT. All other units of the EUT and associated equipment was at least 0.8 m from the LISN 2. 5) In order to find the maximum emission, the relative positions of equipment and all of the interface cables must be changed according to ANSI C63.10: 2013 on conducted measurement. | | |
| Test Setup: |  | | |
| Instruments Used: | Refer to section 3 for details. | | |
| Test Results: | Pass | | |

Measurement Data

An initial pre-scan was performed on the live and neutral lines with peak detector.

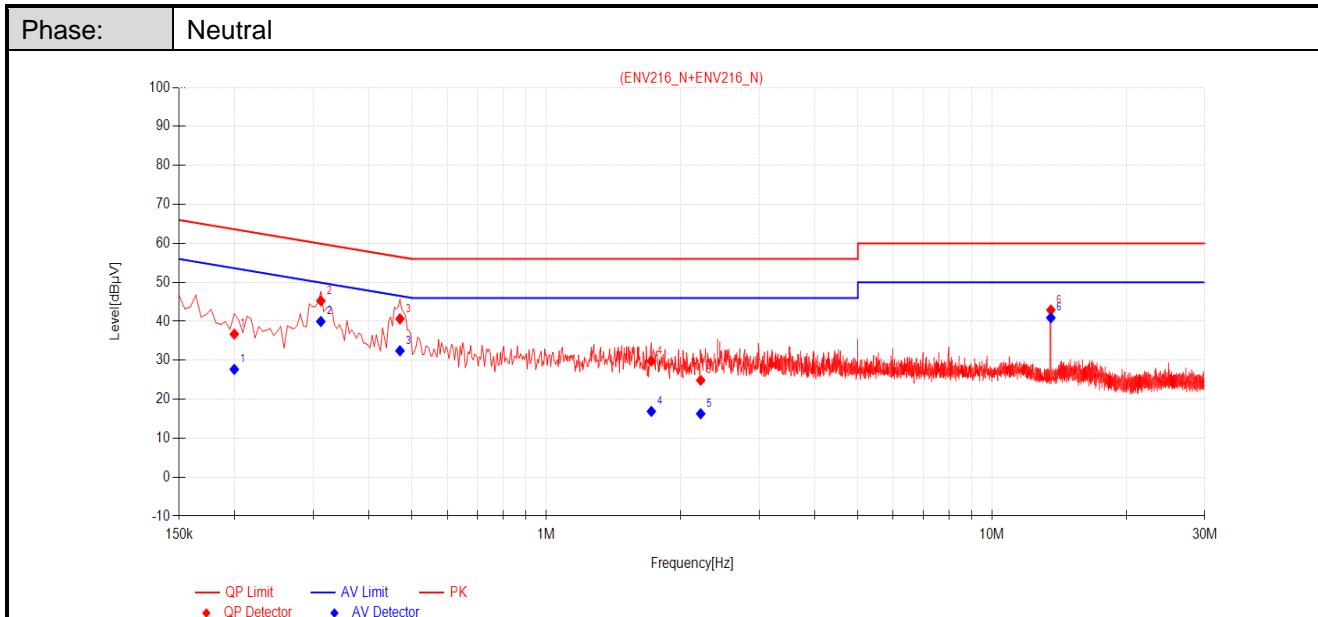
Quasi-Peak and Average measurement were performed at the frequencies with maximized peak emission were detected.



| Final Data List | | | | | | | | | | | |
|-----------------|-----------------|-------------|-------------------------|-----------------------|-----------------------|----------------|-------------------------|-----------------------|-----------------------|----------------|---------|
| NO. | Frequency [MHz] | Factor [dB] | QP Reading [dB μ V] | QP Value [dB μ V] | QP Limit [dB μ V] | QP Margin [dB] | AV Reading [dB μ V] | AV Value [dB μ V] | AV Limit [dB μ V] | AV Margin [dB] | Verdict |
| 1 | 0.1590 | 10.08 | 29.87 | 39.95 | 65.52 | 25.57 | 12.03 | 22.11 | 55.52 | 33.41 | PASS |
| 2 | 0.4650 | 10.07 | 34.41 | 44.48 | 56.60 | 12.12 | 23.17 | 33.24 | 46.60 | 13.36 | PASS |
| 3 | 0.9780 | 9.96 | 18.29 | 28.25 | 56.00 | 27.75 | 7.08 | 17.04 | 46.00 | 28.96 | PASS |
| 4 | 2.5305 | 9.82 | 17.09 | 26.91 | 56.00 | 29.09 | 6.11 | 15.93 | 46.00 | 30.07 | PASS |
| 5 | 4.7895 | 9.83 | 13.60 | 23.43 | 56.00 | 32.57 | 4.85 | 14.68 | 46.00 | 31.32 | PASS |
| 6 | 13.5555 | 9.81 | 30.79 | 40.60 | 60.00 | 19.40 | 27.79 | 37.60 | 50.00 | 12.40 | PASS |

Remark:

1. The following Quasi-Peak and Average measurements were performed on the EUT:
2. Value =Reading[dB μ V] + Factor(Lisn factor[dB] + cable loss[dB]).
3. Margin = Limit[dB μ V] – Value[dB μ V]



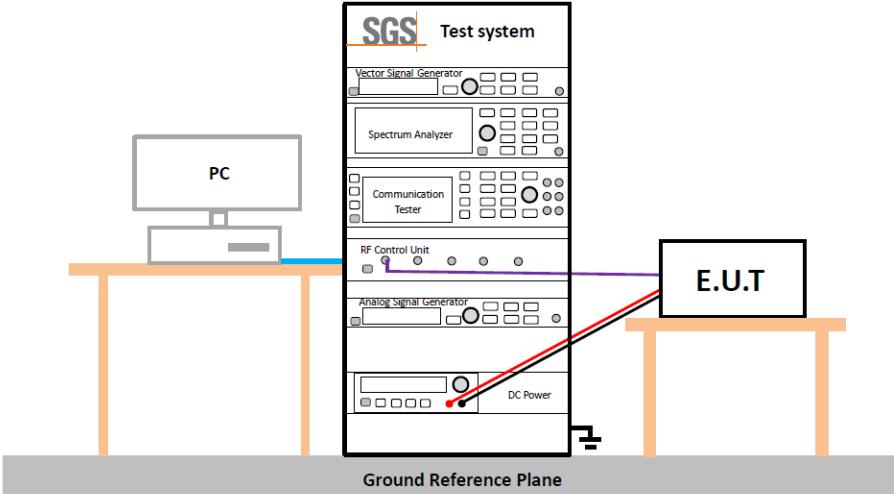
Final Data List

| NO. | Frequency [MHz] | Factor [dB] | QP Reading [dB μ V] | QP Value [dB μ V] | QP Limit [dB μ V] | QP Margin [dB] | AV Reading [dB μ V] | AV Value [dB μ V] | AV Limit [dB μ V] | AV Margin [dB] | Verdict |
|-----|-----------------|-------------|-------------------------|-----------------------|-----------------------|----------------|-------------------------|-----------------------|-----------------------|----------------|---------|
| 1 | 0.1995 | 10.08 | 26.64 | 36.72 | 63.63 | 26.91 | 17.59 | 27.67 | 53.63 | 25.96 | PASS |
| 2 | 0.3120 | 10.07 | 35.18 | 45.25 | 59.92 | 14.67 | 29.88 | 39.95 | 49.92 | 9.97 | PASS |
| 3 | 0.4695 | 10.06 | 30.58 | 40.64 | 56.52 | 15.88 | 22.38 | 32.44 | 46.52 | 14.08 | PASS |
| 4 | 1.7205 | 9.92 | 19.86 | 29.78 | 56.00 | 26.22 | 6.96 | 16.88 | 46.00 | 29.12 | PASS |
| 5 | 2.2200 | 9.90 | 14.97 | 24.87 | 56.00 | 31.13 | 6.36 | 16.26 | 46.00 | 29.74 | PASS |
| 6 | 13.551 | 9.75 | 33.15 | 42.90 | 60.00 | 17.10 | 31.15 | 40.90 | 50.00 | 9.10 | PASS |

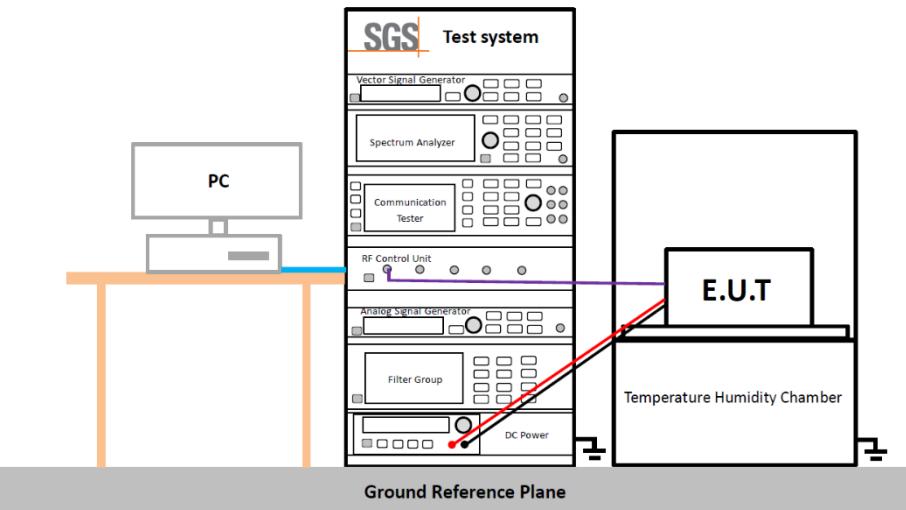
Remark:

1. The following Quasi-Peak and Average measurements were performed on the EUT:
2. Value =Reading[dB μ V] + Factor(List factor[dB] + cable loss[dB]).
3. Margin = Limit[dB μ V] – Value[dB μ V]

5.4 20dB Spectrum Bandwidth & 99% Occupied Bandwidth

| | |
|---|--|
| Test Requirement: | 47 CFR Part 15C Section 15.215(c) |
| Test Method: | ANSI C63.10: 2013 Section 6.9.3 |
| Test Setup: |  |
| Instruments Used: | Refer to section 3 for details |
| Limit: | Intentional radiators must be designed to ensure that the 20dB and 99% emission bandwidth in the specific band 13.553~13.567MHz. |
| Test Results: | Pass |
| The detailed test data see: Appendix | |

5.5 Frequency Stability

| | |
|-------------------|---|
| Test Requirement: | 47 CFR Part 15C Section 15.225(e) |
| Test Method: | ANSI C63.10: 2013 Section 6.8 |
| Test Setup: |  |
| Instruments Used: | Refer to section 3 for details |
| Limit: | <p>The frequency tolerance of the carrier signal shall be maintained within +/- 0.01% (100ppm) of the operating frequency over a temperature variation of -20 degrees to +50 degrees C at normal supply voltage, and for a variation in the primary supply voltage from 85% to 115% of the rated supply voltage at a temperature of 20 degrees C. For battery operated equipment, the equipment tests shall be performed using a new battery.</p> <p>While maintaining a constant temperature inside the environmental chamber, turn the EUT ON and record the operating frequency at startup, and at 2 minutes, 5 minutes, and 10 minutes after the EUT is energized. Four measurements in total are made.</p> |
| Test Results: | Pass |

The detailed test data see: **Appendix**

5.6 Field Strength of Fundamental Emissions

| Test Requirement: | 47 CFR Part 15C Section 15.225 | | | | |
|-------------------|--|------------------------------------|--------------------------------------|--------------------------------------|-------------------------------------|
| Test Method: | ANSI C63.10 :2013 Section 6.4.7 | | | | |
| Test Site: | Measurement Distance: 3m (Semi-Anechoic Chamber) | | | | |
| Limit: | Frequency | Field Strength (μ V/m) at 30m | Field Strength (dB μ V/m) at 30m | Field Strength (dB μ V/m) at 10m | Field Strength (dB μ V/m) at 3m |
| | 1.705~13.110 MHz | 30 | 29.5 | 48.58 | 69.5 |
| | 13.110-13.410 MHz | 106 | 40.5 | 59.58 | 80.5 |
| | 13.410-13.553 MHz | 334 | 50.5 | 69.58 | 90.5 |
| | 13.553-13.567 MHz | 15,848 | 84.0 | 103.08 | 124.0 |
| | 13.567-13.710 MHz | 334 | 50.5 | 69.58 | 90.5 |
| | 13.710-14.010 MHz | 106 | 40.5 | 59.58 | 80.5 |
| | 14.010~30.000 MHz | 30 | 29.5 | 48.58 | 69.5 |

Test Setup:

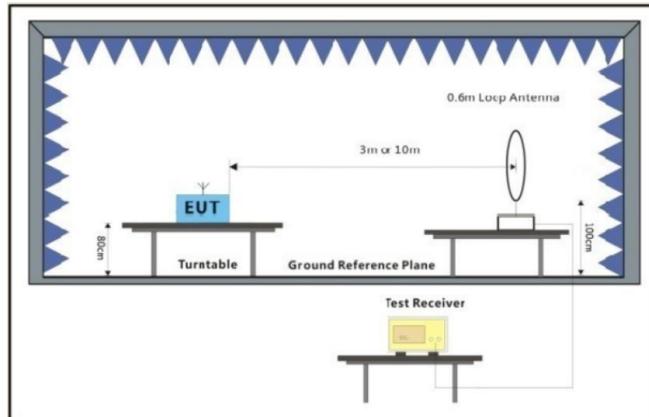


Figure 1. Below 30MHz

| | |
|------------------|---|
| Test Procedure: | <ol style="list-style-type: none"> The EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3 or 10 meter semi-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation. The EUT was set 3 or 10 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower. The antenna height is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters(for the test frequency of below 30MHz, the antenna was tuned to heights 1 meter) and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading. The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode. The radiation measurements are performed in X, Y, Z axis positioning for Transmitting mode, And found the X axis positioning which it is worse case. Repeat above procedures until all frequencies measured was complete. RBW set to 9kHz. |
| Exploratory Test | Transmitting with modulation. |

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| | |
|---|---|
| Mode: | Charge + Transmitting mode. |
| Final Test Mode: | Transmitting with modulation. Pretest the EUT at Charge + Transmitting mode. Only the worst case is recorded in the report. |
| Instruments Used: | Refer to section 3 for details |
| Test Results: | Pass |
| The detailed test data see: Appendix | |

5.7 Radiated Spurious Emissions

| | | | | | |
|--|--|----------------------------------|----------------|------------|--------------------------|
| Test Requirement: | 47 CFR Part 15C Section 15.209 and 15.225 | | | | |
| Test Method: | ANSI C63.10 :2013 Section 6.4&6.5 | | | | |
| Test Site: | Measurement Distance: 3m (Semi-Anechoic Chamber) | | | | |
| Limit: | Frequency | Field strength (microvolt/meter) | Limit (dBuV/m) | Remark | Measurement distance (m) |
| | 0.009MHz-0.490MHz | 2400/F(kHz) | - | - | 300 |
| | 0.490MHz-1.705MHz | 24000/F(kHz) | - | - | 30 |
| | 1.705MHz-30MHz | 30 | - | - | 30 |
| | 30MHz-88MHz | 100 | 40.0 | Quasi-peak | 3 |
| | 88MHz-216MHz | 150 | 43.5 | Quasi-peak | 3 |
| | 216MHz-960MHz | 200 | 46.0 | Quasi-peak | 3 |
| | Above 960MHz | 500 | 54.0 | Quasi-peak | 3 |
| Remark: The emission limits shown in the above table are based on measurements employing a CISPR quasi-peak detector except for the frequency bands 9-90kHz, 110-490kHz and above 1000 MHz. Radiated emission limits in these three bands are based on measurements employing an average detector, the peak field strength of any emission shall not exceed the maximum permitted average limits specified above by more than 20 dB under any condition of modulation. | | | | | |

Test Setup:

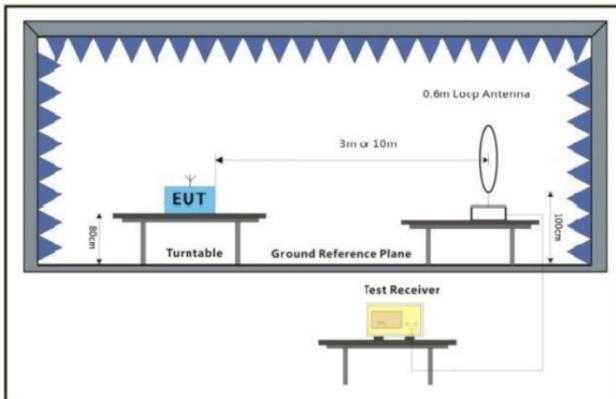


Figure 1. Below 30MHz

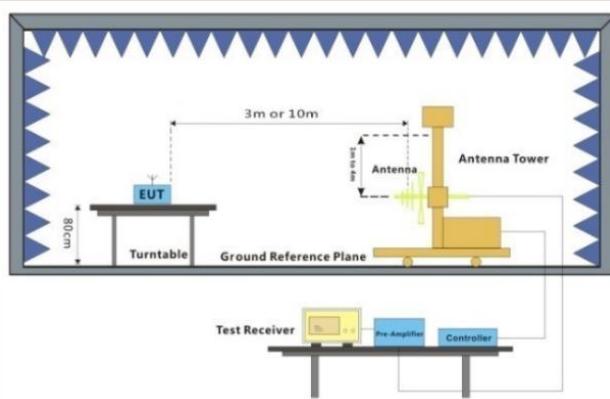


Figure 2. Above 30MHz

| | |
|-----------------|---|
| Test Procedure: | <ol style="list-style-type: none"> i. The EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3 meter semi-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation. j. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower. k. The antenna height is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement. l. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters(for the test frequency of below 30MHz, the antenna was tuned to heights 1 meter) and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading. m. The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode. n. The radiation measurements are performed in X, Y, Z axis positioning for |
|-----------------|---|

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| | |
|------------------------|--|
| | Transmitting mode, And found the X axis positioning which it is worse case. o. Repeat above procedures until all frequencies measured was complete. |
| Exploratory Test Mode: | Transmitting with modulation. Charge + Transmitting mode. |
| Final Test Mode: | Transmitting with modulation. Pretest the EUT at Charge + Transmitting mode. Only the worst case is recorded in the report. |
| Instruments Used: | Refer to section 3 for details |
| Test Results: | Pass |

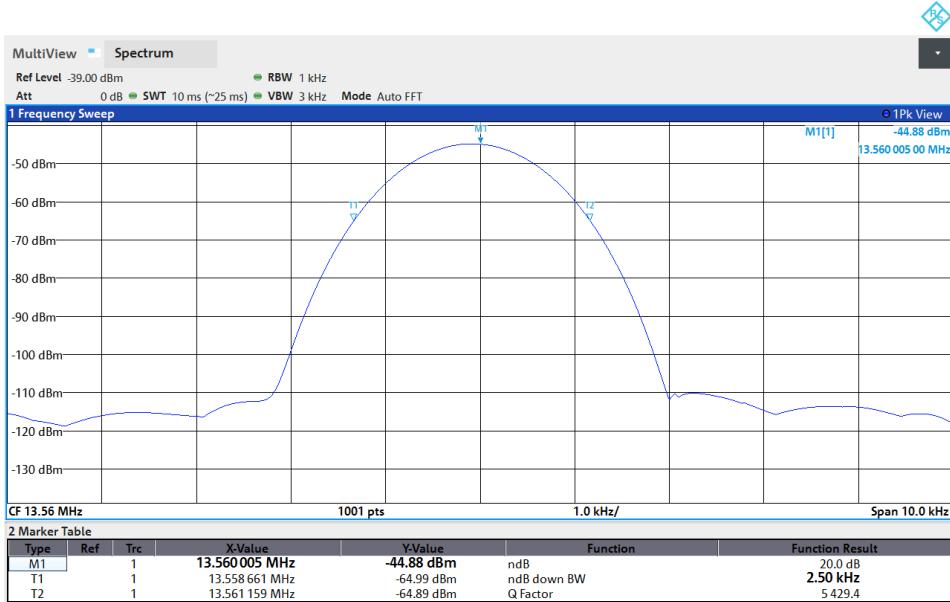
The detailed test data see: **Appendix**

6 Photographs - Setup Photos

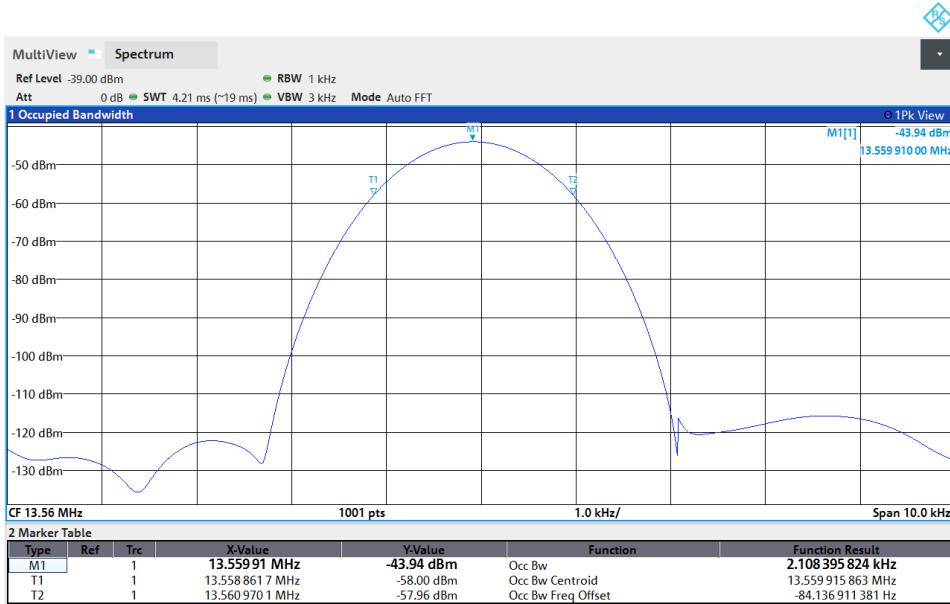
Refer to Appendix A.2 BT&WLAN&NFC Setup Photos.

7 Appendix

20dB Bandwidth



99% Occupied Bandwidth



Note:

Because the measured signal is CW or CW-like adjusting the RBW per C63.10 would not be practical since measured bandwidth will always follow the RBW and the result will be approximately twice the RBW.

Frequency tolerance

| Declared Frequency (MHz) | | 13.56MHz | | | |
|--------------------------|--------------|----------------------------|-------------------------|-----------|--------|
| Startup | | | | | |
| Temperature (°C) | Voltage(VDC) | Measurement Frequency(MHz) | Frequency Tolerance (%) | Limit (%) | Result |
| 50 | 3.85 | 13.55994 | 0.0001 | ±0.01 | Pass |
| 40 | | 13.55993 | 0.0001 | | Pass |
| 30 | | 13.55994 | 0.0003 | | Pass |
| 20 | | 13.55995 | 0.0001 | | Pass |
| 10 | | 13.55997 | 0.0001 | | Pass |
| 0 | | 13.55995 | 0.0001 | | Pass |
| -10 | | 13.55996 | 0.0003 | | Pass |
| -20 | | 13.55995 | 0.0003 | | Pass |
| 20 | 4.40 | 13.55994 | 0.0001 | | Pass |
| | 3.60 | 13.55993 | 0.0001 | | Pass |

| Declared Frequency (MHz) | | 13.56MHz | | | |
|--------------------------|--------------|----------------------------|-------------------------|-----------|--------|
| 2mins | | | | | |
| Temperature (°C) | Voltage(VDC) | Measurement Frequency(MHz) | Frequency Tolerance (%) | Limit (%) | Result |
| 50 | 3.85 | 13.55995 | 0.0001 | ±0.01 | Pass |
| 40 | | 13.55997 | 0.0001 | | Pass |
| 30 | | 13.55995 | 0.0001 | | Pass |
| 20 | | 13.55996 | 0.0003 | | Pass |
| 10 | | 13.55994 | 0.0002 | | Pass |
| 0 | | 13.55993 | 0.0002 | | Pass |
| -10 | | 13.55994 | 0.0003 | | Pass |
| -20 | | 13.55992 | 0.0003 | | Pass |
| 20 | 4.40 | 13.55994 | 0.0003 | | Pass |
| | 3.60 | 13.55996 | 0.0001 | | Pass |

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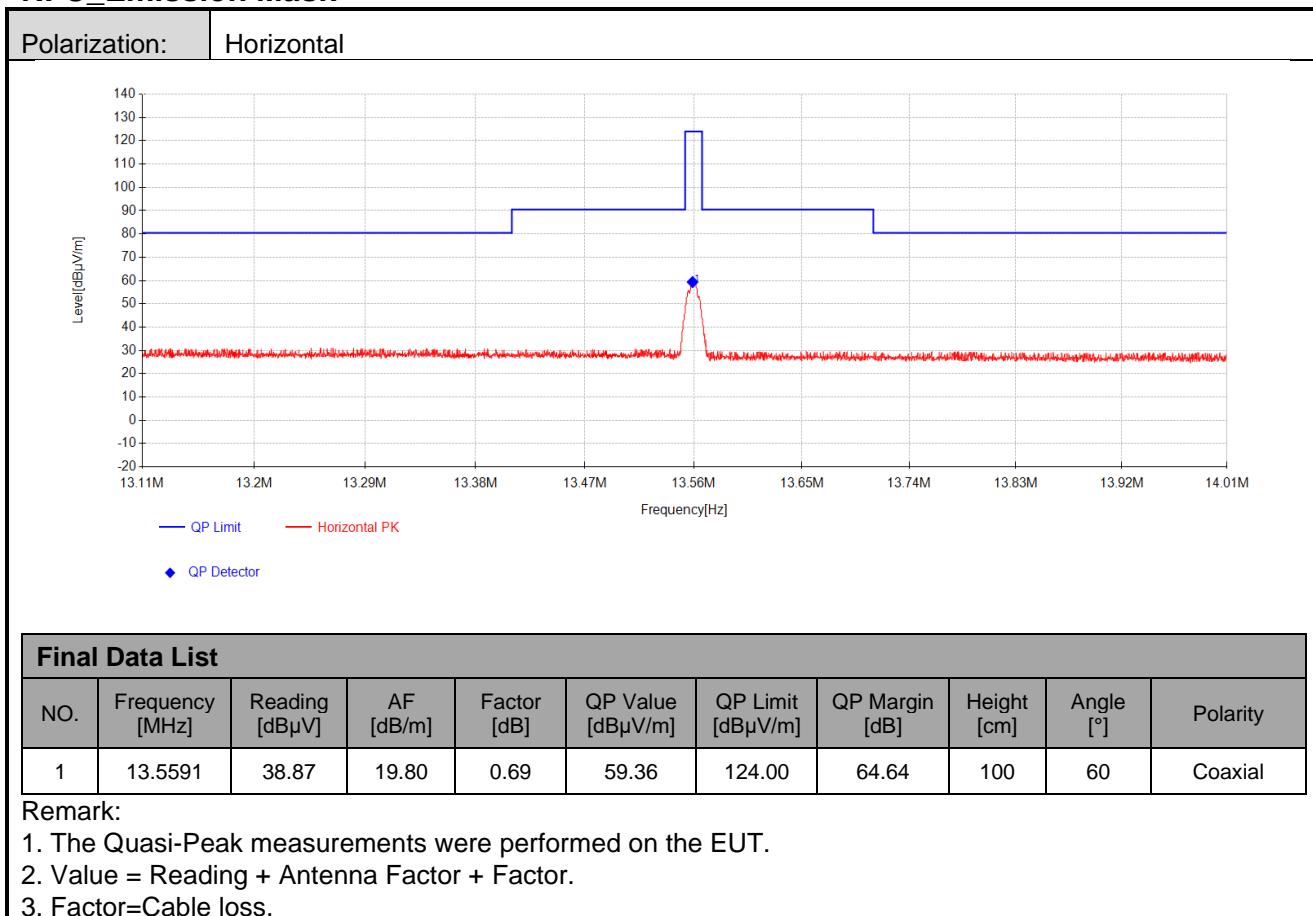
Report No.: SUCR250500048706

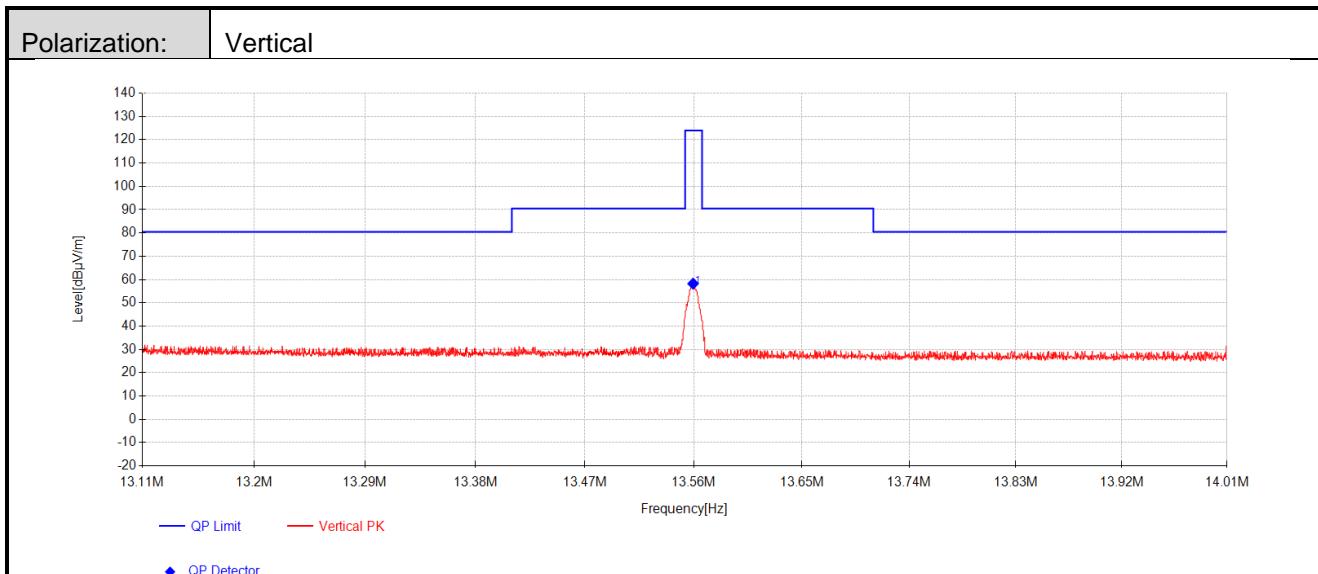
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| Declared Frequency (MHz) | | 13.56MHz | | | |
|--------------------------|--------------|----------------------------|-------------------------|-----------|--------|
| 5mins | | | | | |
| Temperature (°C) | Voltage(VDC) | Measurement Frequency(MHz) | Frequency Tolerance (%) | Limit (%) | Result |
| 50 | 3.85 | 13.55994 | 0.0001 | ±0.01 | Pass |
| 40 | | 13.55998 | 0.0001 | | Pass |
| 30 | | 13.55994 | 0.0001 | | Pass |
| 20 | | 13.55992 | 0.0003 | | Pass |
| 10 | | 13.55991 | 0.0002 | | Pass |
| 0 | | 13.55998 | 0.0001 | | Pass |
| -10 | | 13.55992 | 0.0002 | | Pass |
| -20 | | 13.55994 | 0.0001 | | Pass |
| 20 | 4.40 | 13.55993 | 0.0001 | | Pass |
| | 3.60 | 13.55997 | 0.0003 | | Pass |

| Declared Frequency (MHz) | | 13.56MHz | | | |
|--------------------------|--------------|----------------------------|-------------------------|-----------|--------|
| 10mins | | | | | |
| Temperature (°C) | Voltage(VDC) | Measurement Frequency(MHz) | Frequency Tolerance (%) | Limit (%) | Result |
| 50 | 3.85 | 13.55994 | 0.0001 | ±0.01 | Pass |
| 40 | | 13.55992 | 0.0001 | | Pass |
| 30 | | 13.55991 | 0.0001 | | Pass |
| 20 | | 13.55993 | 0.0003 | | Pass |
| 10 | | 13.55994 | 0.0003 | | Pass |
| 0 | | 13.55991 | 0.0001 | | Pass |
| -10 | | 13.55993 | 0.0003 | | Pass |
| -20 | | 13.55994 | 0.0002 | | Pass |
| 20 | 4.40 | 13.55993 | 0.0001 | | Pass |
| | 3.60 | 13.55994 | 0.0001 | | Pass |

Field Strength of Fundamental Emissions**NFC_Emission Mask**



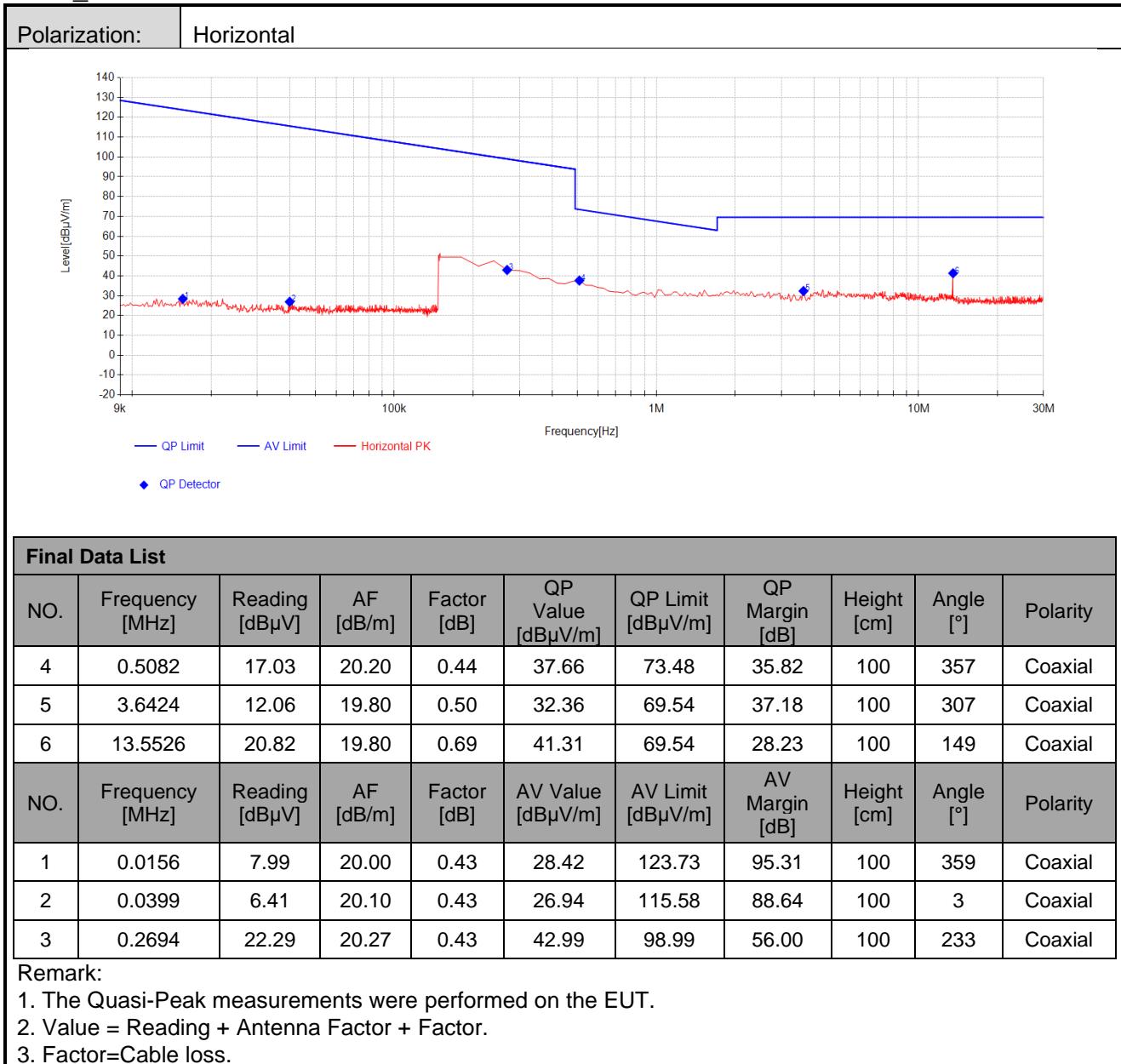
| Final Data List | | | | | | | | | | |
|-----------------|-----------------|----------------------|-----------|-------------|-------------------------|-------------------------|----------------|-------------|-----------|----------|
| NO. | Frequency [MHz] | Reading [dB μ V] | AF [dB/m] | Factor [dB] | QP Value [dB μ V/m] | QP Limit [dB μ V/m] | QP Margin [dB] | Height [cm] | Angle [°] | Polarity |
| 1 | 13.5596 | 37.75 | 19.80 | 0.69 | 58.24 | 124.00 | 65.76 | 100 | 4 | Coplanar |

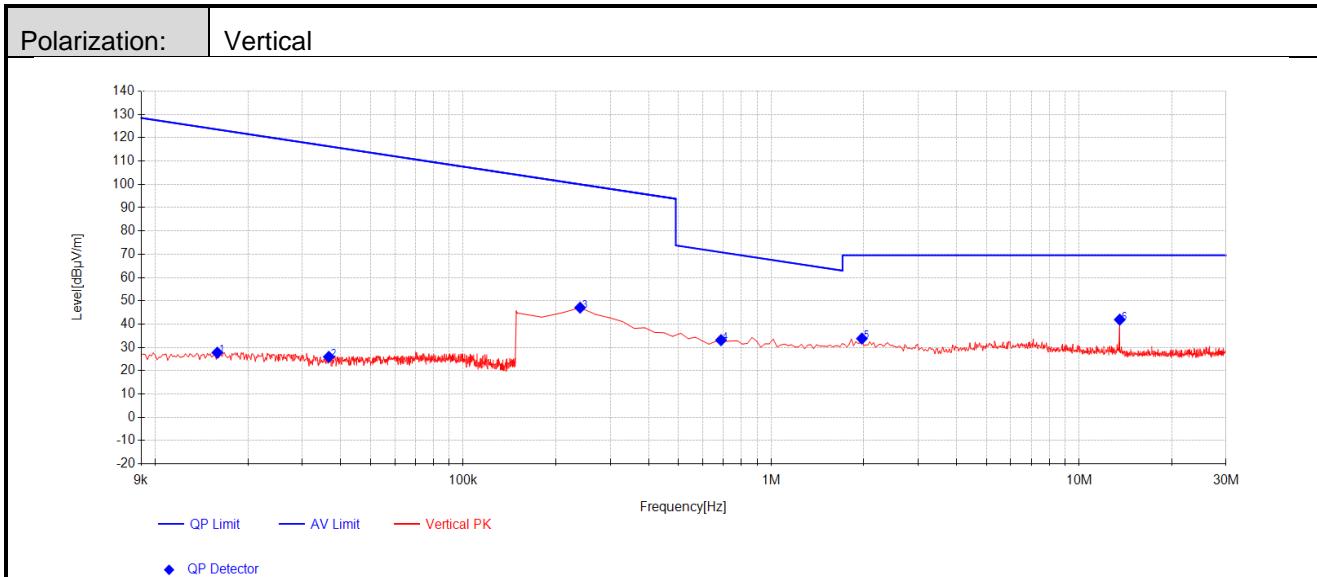
Remark:

1. The Quasi-Peak measurements were performed on the EUT.
2. Value = Reading + Antenna Factor + Factor.
3. Factor=Cable loss.

Radiated Spurious Emissions

NFC_RSE below 30M

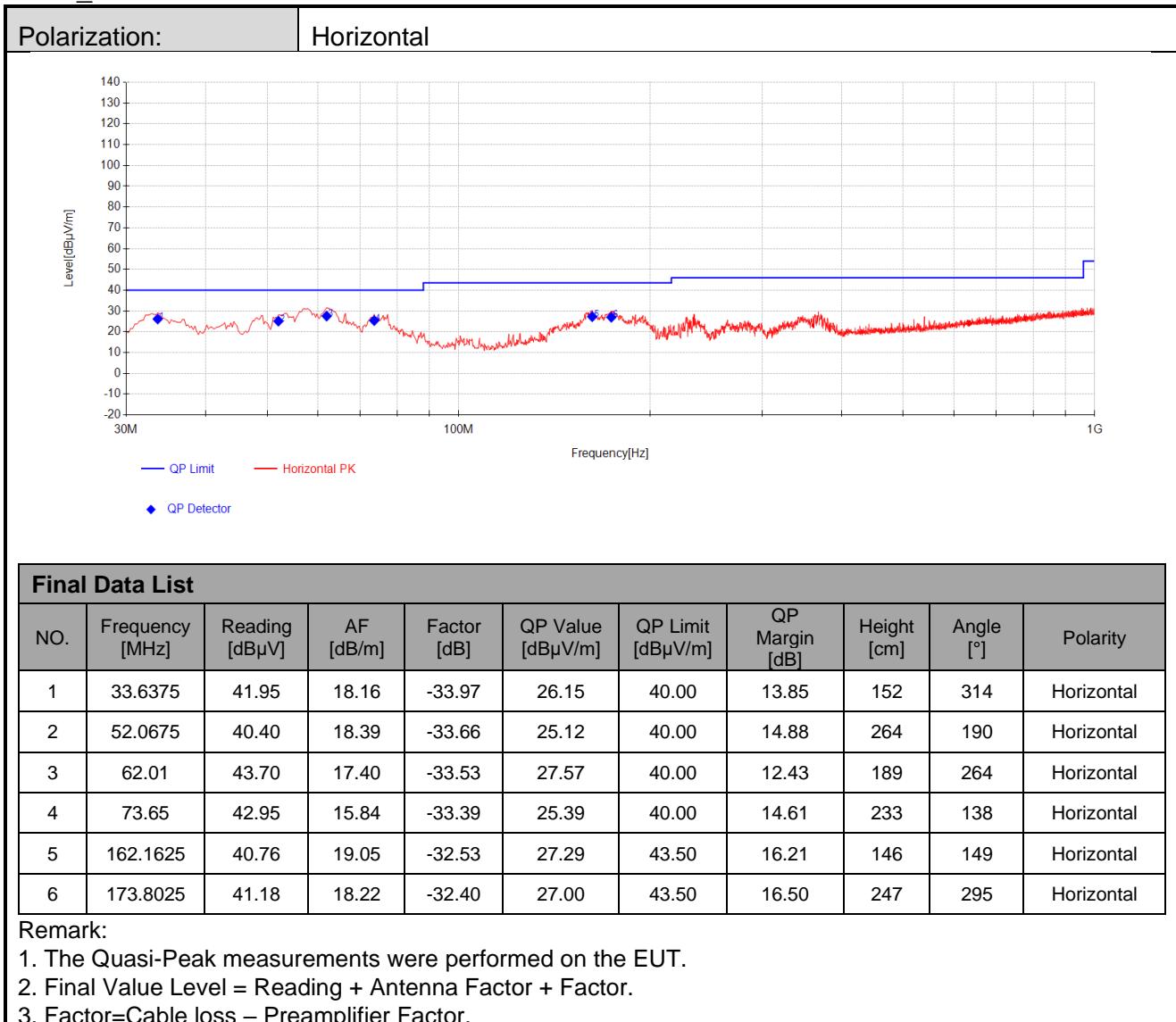


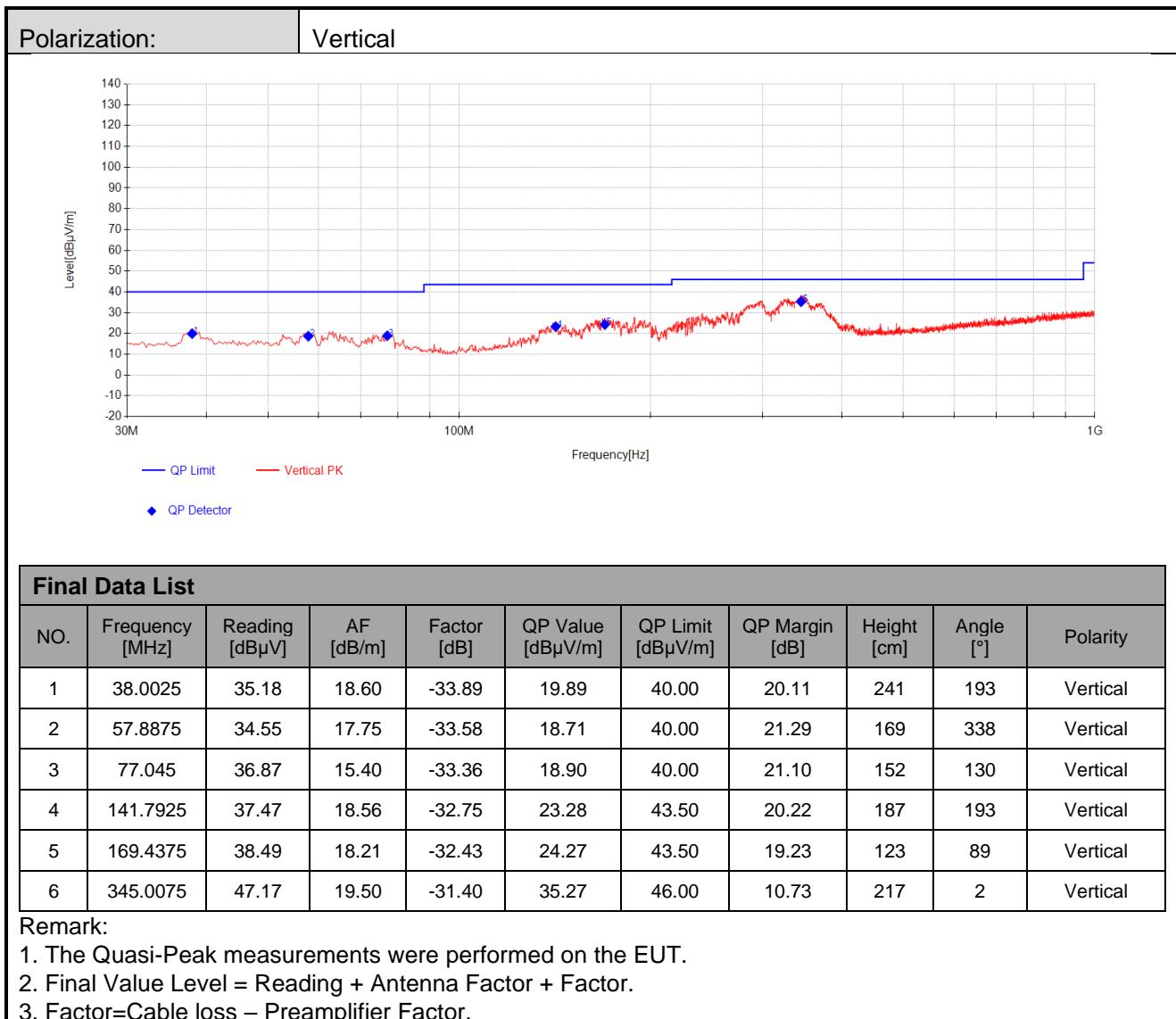


| Final Data List | | | | | | | | | | |
|-----------------|-----------------|----------------------|-----------|-------------|-------------------------|-------------------------|----------------|-------------|-----------|----------|
| NO. | Frequency [MHz] | Reading [dB μ V] | AF [dB/m] | Factor [dB] | QP Value [dB μ V/m] | QP Limit [dB μ V/m] | QP Margin [dB] | Height [cm] | Angle [°] | Polarity |
| 4 | 0.6873 | 12.59 | 20.09 | 0.44 | 33.12 | 70.86 | 37.74 | 100 | 334 | Coplanar |
| 5 | 1.9708 | 13.48 | 19.85 | 0.47 | 33.80 | 69.54 | 35.74 | 100 | 5 | Coplanar |
| 6 | 13.5526 | 21.43 | 19.80 | 0.69 | 41.92 | 69.54 | 27.62 | 100 | 178 | Coplanar |
| NO. | Frequency [MHz] | Reading [dB μ V] | AF [dB/m] | Factor [dB] | AV Value [dB μ V/m] | AV Limit [dB μ V/m] | AV Margin [dB] | Height [cm] | Angle [°] | Polarity |
| 1 | 0.0159 | 7.33 | 20.00 | 0.43 | 27.76 | 123.57 | 95.81 | 100 | 44 | Coplanar |
| 2 | 0.0366 | 5.42 | 20.10 | 0.43 | 25.95 | 116.33 | 90.38 | 100 | 347 | Coplanar |
| 3 | 0.2396 | 26.36 | 20.27 | 0.43 | 47.07 | 100.01 | 52.94 | 100 | 252 | Coplanar |

Remark:

1. The Quasi-Peak measurements were performed on the EUT.
2. Value = Reading + Antenna Factor + Factor.
3. Factor=Cable loss.

NFC_RSE Above 30M



---End of Report---