

## FCC Test Report

Report Reference No.....: HK2502080452-16E

FCC ID.....: 2BDI3-K

Compiled by

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Supervised by

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Jason Zhou

Date of issue.....: Apr. 10, 2025

Testing Laboratory Name .....: Shenzhen HUAKE Testing Technology Co., Ltd.

Address .....: 1-2/F., Building B2, Junfeng Zhongcheng Zhizao Innovation Park,  
Heping, Fuhai Street, Bao'an District, Shenzhen, Guangdong, China

Applicant's name.....: Shenzhen Haimeilan Technology Co., LTD.

Address .....: 9V777, East 9th Floor, Building 2, SEG Science Park, Huaqiang  
North Street, Futian District, Shenzhen, 518000 China

Test specification .....

Standard .....: FCC CFR Title 47 Part 2, Part 27

TRF Originator.....: Shenzhen HUAKE Testing Technology Co., Ltd.

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Test item description .....: Smart Phone

Trade Mark .....: N/A

Manufacturer.....: Shenzhen Haimeilan Technology Co., LTD.

Model/Type reference.....: S25 Ultra

Series Models .....: F5 Pro, M13, F50 Pro, M5S Pro, F5, Note12 Pro, X40 Pro, X40  
Edge, Mate 14, Mate 16, Mate 17, Mate 18, Mate 19, Mate 20, Mate  
21, Mate 22, Mate 23, Mate 24, Mate 25, Mate 26, Mate 27,  
Mate28, D14, D16, D17, D18, D19, D20, D21, D22, D23, D24, D25,  
D26, D27, D28, D29, R12 pro, P5 pro, E50 Ultra, I16 pro max, P6  
pro, Sp20 Pro, OP12 pro, T3 Pro, P8 Pro

Modulation Type.....: QPSK, 16QAM

Rating .....: DC5V from Type-C or DC3.85V from battery

Hardware version .....: V2.0

Software version.....: V2.0

Result.....: PASS

## TEST REPORT

|                         |                         |               |
|-------------------------|-------------------------|---------------|
| <b>Test Report No.:</b> | <b>HK2502080452-16E</b> | Apr. 10, 2025 |
|                         |                         | Date of issue |

Equipment under Test : Smart Phone

Model /Type : S25 Ultra

Series Models : F5 Pro, M13, F50 Pro, M5S Pro, F5, Note12 Pro, X40 Pro, X40 Edge, Mate 14, Mate 16, Mate 17, Mate 18, Mate 19, Mate 20, Mate 21, Mate 22, Mate 23, Mate 24, Mate 25, Mate 26, Mate 27, Mate28, D14, D16, D17, D18, D19, D20, D21, D22, D23, D24, D25, D26, D27, D28, D29, R12 pro, P5 pro, E50 Ultra, I16 pro max, P6 pro, Sp20 Pro, OP12 pro, T3 Pro, P8 Pro

Applicant : Shenzhen Haimeilan Technology Co., LTD.

Address : 9V777, East 9th Floor, Building 2, SEG Science Park, Huaqiang North Street, Futian District, Shenzhen, 518000 China

Manufacturer : Shenzhen Haimeilan Technology Co., LTD.

Address : 9V777, East 9th Floor, Building 2, SEG Science Park, Huaqiang North Street, Futian District, Shenzhen, 518000 China

|                     |             |
|---------------------|-------------|
| <b>Test Result:</b> | <b>PASS</b> |
|---------------------|-------------|

The test report merely corresponds to the test sample.

It is not permitted to copy extracts of these test result without the written permission of the test laboratory.

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**\*\* Modified History \*\***

| Revision     | Description                 | Issued Data   | Remark     |
|--------------|-----------------------------|---------------|------------|
| Revision 1.0 | Initial Test Report Release | Apr. 10, 2025 | Jason Zhou |
|              |                             |               |            |
|              |                             |               |            |

## **1 Test Standards**

The tests were performed according to following standards:

[FCC Part 2:](#) FREQUENCY ALLOCATIONS AND RADIO TREATY MATTERS; GENERAL RULES AND REGULATIONS

[FCC Part 27 :](#) MISCELLANEOUS WIRELESS COMMUNICATIONS SERVICES

[ANSI/TIA-603-E-2016:](#) Land Mobile FM or PM Communications Equipment Measurement and Performance Standards.

[ANSI C63.26-2015:](#) IEEE/ANSI Standard for Compliance Testing of Transmitters Used in Licensed Radio Services

[KDB 971168 D01 v03r01:](#) Measurement Guidance For Certification Of Licensed Digital Transmitters

## 2 Summary

### 2.1 General Remarks

|                                |   |               |
|--------------------------------|---|---------------|
| Date of receipt of test sample | : | Feb. 08, 2025 |
|                                |   |               |
| Testing commenced on           | : | Feb. 08, 2025 |
|                                |   |               |
| Testing concluded on           | : | Apr. 10, 2025 |

### 2.2 Product Description

The **Shenzhen Haimeilan Technology Co., LTD.**'s Model: S25 Ultra or the "EUT" as referred to in this report; more general information as follows, for more details, refer to the user's manual of the EUT.

|                                                                                                                                                                                                                                                                                                                      |                                                                                                                                                                                                                                                                                                                                                               |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Name of EUT                                                                                                                                                                                                                                                                                                          | Smart Phone                                                                                                                                                                                                                                                                                                                                                   |
| Model/Type reference:                                                                                                                                                                                                                                                                                                | S25 Ultra                                                                                                                                                                                                                                                                                                                                                     |
| Series Models:                                                                                                                                                                                                                                                                                                       | F5 Pro, M13, F50 Pro, M5S Pro, F5, Note12 Pro, X40 Pro, X40 Edge, Mate 14, Mate 16, Mate 17, Mate 18, Mate 19, Mate 20, Mate 21, Mate 22, Mate 23, Mate 24, Mate 25, Mate 26, Mate 27, Mate28, D14, D16, D17, D18, D19, D20, D21, D22, D23, D24, D25, D26, D27, D28, D29, R12 pro, P5 pro, E50 Ultra, I16 pro max, P6 pro, Sp20 Pro, OP12 pro, T3 Pro, P8 Pro |
| Model Difference:                                                                                                                                                                                                                                                                                                    | All model's the function, software and electric circuit are the same, only with appearance, product color and model named different.<br>Test sample model: S25 Ultra.                                                                                                                                                                                         |
| Power supply:                                                                                                                                                                                                                                                                                                        | DC5V from Type-C or DC3.85V from battery                                                                                                                                                                                                                                                                                                                      |
| Modulation Type                                                                                                                                                                                                                                                                                                      | QPSK, 16QAM                                                                                                                                                                                                                                                                                                                                                   |
| Antenna Type                                                                                                                                                                                                                                                                                                         | FPC Antenna                                                                                                                                                                                                                                                                                                                                                   |
| Antenna Gain                                                                                                                                                                                                                                                                                                         | 0.4dBi                                                                                                                                                                                                                                                                                                                                                        |
| Operation Frequency Band                                                                                                                                                                                                                                                                                             | LTE Band 41                                                                                                                                                                                                                                                                                                                                                   |
| Operation frequency                                                                                                                                                                                                                                                                                                  | LTE Band 41: 2535-2655 MHz                                                                                                                                                                                                                                                                                                                                    |
| LTE Release                                                                                                                                                                                                                                                                                                          | R8                                                                                                                                                                                                                                                                                                                                                            |
| Extreme temp. Tolerance                                                                                                                                                                                                                                                                                              | -30°C to +50°C                                                                                                                                                                                                                                                                                                                                                |
| Extreme vol. Limits                                                                                                                                                                                                                                                                                                  | 4.5VDC to 5.5VDC (nominal: 12VDC)                                                                                                                                                                                                                                                                                                                             |
| Note:<br>1. For a more detailed features description, please refer to the manufacturer's specifications or the User's Manual.<br>2. Antenna gain Refer to the antenna specifications.<br>3. The cable loss data is obtained from the supplier.<br>4. The test results in the report only apply to the tested sample. |                                                                                                                                                                                                                                                                                                                                                               |

### 2.3 Equipment under Test

#### Power supply system utilised

|                      |   |                                                                   |                                 |
|----------------------|---|-------------------------------------------------------------------|---------------------------------|
| Power supply voltage | : | <input type="radio"/> 120V/ 60 Hz                                 | <input type="radio"/> 115V/60Hz |
|                      |   | <input type="radio"/> 12 V DC                                     | <input type="radio"/> 24 V DC   |
|                      |   | <input checked="" type="radio"/> Other (specified in blank below) |                                 |

DC5V from Type-C or DC3.85V from battery

The results shown in this test report refer only to the sample(s) tested unless otherwise stated and the sample(s) are retained for 15 days only. The document is issued by Shenzhen HUAKE Testing Technology Co., Ltd., this document cannot be reproduced except in full with our prior written permission.

## 2.4 Normal Accessory setting

Fully charged battery was used during the test.

## 2.5 EUT configuration

The following peripheral devices and interface cables were connected during the measurement:

- - supplied by the manufacturer
- - supplied by the lab

|               |                |   |
|---------------|----------------|---|
| ○ Power Cable | Length (m) :   | / |
|               | Shield :       | / |
|               | Detachable :   | / |
| ○ Multimeter  | Manufacturer : | / |
|               | Model No. :    | / |

## 2.6 Related Submittal(s) / Grant (s)

This submittal(s) (test report) is intended filing to comply with FCC Part 27, Rules.

## 2.7 Modifications

No modifications were implemented to meet testing criteria.

## 2.8 General Test Conditions/Configurations

### 2.9.1 Test Environment

| Environment Parameter | Selected Values During Tests |         |
|-----------------------|------------------------------|---------|
| Relative Humidity     | Ambient                      |         |
| Temperature           | TN                           | Ambient |
| Voltage               | VL                           | 4.5V    |
|                       | VN                           | 5V      |
|                       | VH                           | 5.5V    |

NOTE: VL=lower extreme test voltage VN=nominal voltage  
VH=upper extreme test voltage TN=normal temperature

### 3 Test Environment

#### 3.1 Information of The Test Laboratory

Shenzhen HUAKE Testing Technology Co., Ltd.  
 Add.: 1-2/F., Building B2, Junfeng Zhongcheng Zhizao Innovation Park, Heping,  
 Fuhai Street, Bao'an District, Shenzhen, Guangdong, China

Testing Laboratory Authorization:

A2LA Accreditation Code is 4781.01.  
 FCC Designation Number is CN1229.  
 Canada IC CAB identifier is CN0045.  
 CNAS Registration Number is L9589.

#### 3.2 Test Description

| Test Item                               | FCCRuleNo.                 | Verdict |
|-----------------------------------------|----------------------------|---------|
| Effective(Isotropic)RadiatedOutputPower | Part 2.1046<br>27.50(h)(2) | Pass    |
| Peak-AverageRatio                       | Part 2.1046                | Pass    |
| ModulationCharacteristics               | §2.1047                    | N/A     |
| Bandwidth                               | Part 2.1049                | Pass    |
| BandEdgesCompliance                     | Part 2.1051<br>27.53(m)    | Pass    |
| SpuriousEmissionatAntennaTerminals      | Part 2.1051<br>27.53(m)    | Pass    |
| Field Strengthof Spurious<br>Radiation  | Part 2.1053<br>27.53(m)    | Pass    |
| Frequency Stability                     | Part 2.1055<br>27.54       | Pass    |

NOTE 1:For the verdict,the“N/A”denotes“not applicable”,the“N/T”denotes “nottested”.

Remark:

1. The measurement uncertainty is not included in the test result.

### 3.3 Equipments Used during the Test

| Item | Test Equipment                  | Manufacturer    | Model No.             | Serial No. | Calibration Date | Calibration Due Date |
|------|---------------------------------|-----------------|-----------------------|------------|------------------|----------------------|
| 1    | L.I.S.N.                        | R&S             | ENV216                | HKE-002    | 2024/02/20       | 2025/02/19           |
| 2    | L.I.S.N.                        | R&S             | ENV216                | HKE-059    | 2024/02/20       | 2025/02/19           |
| 3    | EMI Test Receiver               | R&S             | ESR                   | HKE-005    | 2024/02/20       | 2025/02/19           |
| 4    | Spectrum analyzer               | Agilent         | N9020A                | HKE-117    | 2024/02/20       | 2025/02/19           |
| 5    | Spectrum analyzer               | R&S             | FSV3044               | HKE-126    | 2024/02/20       | 2025/02/19           |
| 6    | Preamplifier                    | EMCI            | EMC051845S            | HKE-006    | 2024/02/20       | 2025/02/19           |
| 7    | Preamplifier                    | Schwarzbeck     | BBV 9743              | HKE-016    | 2024/02/20       | 2025/02/19           |
| 8    | Preamplifier                    | A.H. Systems    | SAS-574               | HKE-182    | 2024/02/20       | 2025/02/19           |
| 9    | 6dB Attenuator                  | Pasternack      | 6db                   | HKE-184    | 2024/02/20       | 2025/02/19           |
| 10   | EMI Test Receiver               | Rohde & Schwarz | ESR-7                 | HKE-010    | 2024/02/20       | 2025/02/19           |
| 11   | Broadband Antenna               | Schwarzbeck     | VULB9168              | HKE-167    | 2024/02/21       | 2026/02/20           |
| 12   | Loop Antenna                    | COM-POWER       | AL-130R               | HKE-014    | 2024/02/21       | 2026/02/20           |
| 13   | Horn Antenna                    | Schwarzbeck     | 9120D                 | HKE-013    | 2024/02/21       | 2026/02/20           |
| 14   | EMI Test Software               | Tonscend        | JS32-CE 2.5.0.6       | HKE-081    | /                | /                    |
| 15   | EMI Test Software               | Tonscend        | JS32-RE 5.0.0         | HKE-082    | /                | /                    |
| 16   | RF Automatic control unit       | Tonscend        | JS0806-1              | HKE-096    | 2024/02/20       | 2025/02/19           |
| 17   | High pass filter unit           | Tonscend        | JS0806-F              | HKE-055    | 2024/02/20       | 2025/02/19           |
| 18   | Wireless Communication Test Set | R&S             | CMU200                | HKE-026    | 2024/02/20       | 2025/02/19           |
| 19   | Wireless Communication Test Set | R&S             | CMW500                | HKE-027    | 2024/02/20       | 2025/02/19           |
| 20   | High-low temperature chamber    | Guangke         | HT-80L                | HKE-118    | 2024/06/10       | 2025/06/09           |
| 21   | Temperature and humidity meter  | Boyang          | HTC-1                 | HKE-075    | 2024/06/10       | 2025/06/09           |
| 22   | RF Test Software                | Tonscend        | JS1120 Version 3.5.39 | HKE-183    | /                | /                    |
| 23   | RSE Test Software               | Tonscend        | JS36-RSE 5.0.0        | HKE-184    | /                | /                    |

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| Item | Test Equipment                  | Manufacturer    | Model No.             | Serial No. | Calibration Date | Calibration Due Date |
|------|---------------------------------|-----------------|-----------------------|------------|------------------|----------------------|
| 1    | L.I.S.N.                        | R&S             | ENV216                | HKE-002    | 2025/02/19       | 2026/02/18           |
| 2    | L.I.S.N.                        | R&S             | ENV216                | HKE-059    | 2025/02/19       | 2026/02/18           |
| 3    | EMI Test Receiver               | R&S             | ESR                   | HKE-005    | 2025/02/19       | 2026/02/18           |
| 4    | Spectrum analyzer               | Agilent         | N9020A                | HKE-117    | 2025/02/19       | 2026/02/18           |
| 5    | Spectrum analyzer               | R&S             | FSV3044               | HKE-126    | 2025/02/19       | 2026/02/18           |
| 6    | Preamplifier                    | EMCI            | EMC051845S            | HKE-006    | 2025/02/19       | 2026/02/18           |
| 7    | Preamplifier                    | Schwarzbeck     | BBV 9743              | HKE-016    | 2025/02/19       | 2026/02/18           |
| 8    | Preamplifier                    | A.H. Systems    | SAS-574               | HKE-182    | 2025/02/19       | 2026/02/18           |
| 9    | 6dB Attenuator                  | Pasternack      | 6db                   | HKE-184    | 2025/02/19       | 2026/02/18           |
| 10   | EMI Test Receiver               | Rohde & Schwarz | ESR-7                 | HKE-010    | 2025/02/19       | 2026/02/18           |
| 11   | Broadband Antenna               | Schwarzbeck     | VULB9168              | HKE-167    | 2024/02/21       | 2026/02/20           |
| 12   | Loop Antenna                    | COM-POWER       | AL-130R               | HKE-014    | 2024/02/21       | 2026/02/20           |
| 13   | Horn Antenna                    | Schwarzbeck     | 9120D                 | HKE-013    | 2024/02/21       | 2026/02/20           |
| 14   | EMI Test Software               | Tonscend        | JS32-CE 2.5.0.6       | HKE-081    | /                | /                    |
| 15   | EMI Test Software               | Tonscend        | JS32-RE 5.0.0         | HKE-082    | /                | /                    |
| 16   | RF Automatic control unit       | Tonscend        | JS0806-1              | HKE-096    | 2025/02/19       | 2026/02/18           |
| 17   | High pass filter unit           | Tonscend        | JS0806-F              | HKE-055    | 2025/02/19       | 2026/02/18           |
| 18   | Wireless Communication Test Set | R&S             | CMU200                | HKE-026    | 2025/02/19       | 2026/02/18           |
| 19   | Wireless Communication Test Set | R&S             | CMW500                | HKE-027    | 2025/02/19       | 2026/02/18           |
| 20   | High-low temperature chamber    | Guangke         | HT-80L                | HKE-118    | 2025/02/19       | 2026/02/18           |
| 21   | Temperature and humidity meter  | Boyang          | HTC-1                 | HKE-075    | 2025/02/19       | 2026/02/18           |
| 22   | RF Test Software                | Tonscend        | JS1120 Version 3.5.39 | HKE-183    | /                | /                    |
| 23   | RSE Test Software               | Tonscend        | JS36-RSE 5.0.0        | HKE-184    | /                | /                    |

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## 4 Test Conditions and Results

### 4.1 Output Power

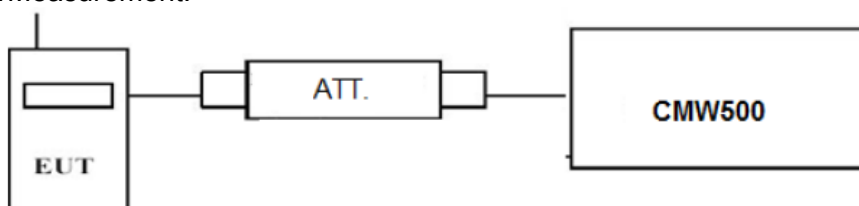
#### 4.1.1 Conducted Output Power

##### TEST APPLICABLE

Part 27.50(h)(2), during the process of testing, the EUT was controlled via R&S Digital Radio Communication tester (CMW500) to ensure max power transmission and proper modulation. This result contains output power measurements for the EUT. In all cases, output power is within the specified limits.

##### TEST CONFIGURATION

Conducted Power Measurement:



##### TEST PROCEDURE

###### Conducted Power Measurement:

- Place the EUT on a bench and set it in transmitting mode.
- Connect a low loss RF cable from the antenna port to a CMW500 by an Att.
- EUT Communicate with CMW500 then selects a channel for testing.
- Add a correction factor to the display CMW500, and then test.

##### TEST RESULTS

Remark:

- We measured all RB Configuration refer 3GPP TS136 521 for each Channel Bandwidth of LTE Band 41;

| LTE Band 41          |                 |                |                           |       |
|----------------------|-----------------|----------------|---------------------------|-------|
| TX Channel Bandwidth | Frequency (MHz) | RB Size/Offset | Burst Average Power [dBm] |       |
|                      |                 |                | QPSK                      | 16QAM |
| 5 MHz                | 2537.5          | 1 RB low       | 20.04                     | 19.45 |
|                      |                 | 1 RB mid       | 20.12                     | 19.51 |
|                      |                 | 1 RB high      | 19.99                     | 19.43 |
|                      |                 | 50% RB low     | 19.06                     | 18.07 |
|                      |                 | 50% RB mid     | 19.06                     | 18.05 |
|                      |                 | 50% RB high    | 19.05                     | 17.99 |
|                      |                 | 100% RB        | 19.11                     | 18.12 |
|                      | 2590.0          | 1 RB low       | 20.56                     | 19.72 |
|                      |                 | 1 RB mid       | 20.68                     | 19.85 |
|                      |                 | 1 RB high      | 20.57                     | 19.73 |
|                      |                 | 50% RB low     | 19.70                     | 18.71 |
|                      |                 | 50% RB mid     | 19.71                     | 18.69 |
|                      |                 | 50% RB high    | 19.76                     | 18.75 |
|                      |                 | 100% RB        | 19.77                     | 18.75 |

|        |        |             |       |       |
|--------|--------|-------------|-------|-------|
|        | 2652.5 | 1 RB low    | 21.80 | 21.13 |
|        |        | 1 RB mid    | 21.92 | 21.31 |
|        |        | 1 RB high   | 21.83 | 21.20 |
|        |        | 50% RB low  | 20.91 | 19.82 |
|        |        | 50% RB mid  | 20.90 | 19.82 |
|        |        | 50% RB high | 20.99 | 19.84 |
|        |        | 100% RB     | 20.96 | 19.97 |
| 10 MHz | 2540.0 | 1 RB low    | 20.11 | 19.39 |
|        |        | 1 RB mid    | 20.29 | 19.54 |
|        |        | 1 RB high   | 20.09 | 19.35 |
|        |        | 50% RB low  | 19.17 | 18.25 |
|        |        | 50% RB mid  | 19.17 | 18.22 |
|        |        | 50% RB high | 19.22 | 18.23 |
|        |        | 100% RB     | 19.18 | 18.17 |
|        | 2590.0 | 1 RB low    | 20.72 | 19.38 |
|        |        | 1 RB mid    | 20.94 | 19.64 |
|        |        | 1 RB high   | 20.77 | 19.42 |
|        |        | 50% RB low  | 19.80 | 18.82 |
|        |        | 50% RB mid  | 19.83 | 18.81 |
|        |        | 50% RB high | 19.85 | 18.81 |
|        |        | 100% RB     | 19.83 | 18.83 |
|        | 2650.0 | 1 RB low    | 21.86 | 21.07 |
|        |        | 1 RB mid    | 22.13 | 21.32 |
|        |        | 1 RB high   | 22.03 | 21.19 |
|        |        | 50% RB low  | 20.92 | 19.98 |
|        |        | 50% RB mid  | 20.94 | 19.95 |
|        |        | 50% RB high | 21.05 | 20.09 |
|        |        | 100% RB     | 20.98 | 19.95 |
| 15 MHz | 2542.5 | 1 RB low    | 20.12 | 19.34 |
|        |        | 1 RB mid    | 20.14 | 19.38 |
|        |        | 1 RB high   | 20.09 | 19.33 |
|        |        | 50% RB low  | 20.16 | 19.19 |
|        |        | 50% RB mid  | 20.19 | 19.23 |
|        |        | 50% RB high | 20.18 | 19.20 |
|        |        | 100% RB     | 19.19 | 18.22 |
|        | 2590.0 | 1 RB low    | 20.74 | 19.48 |
|        |        | 1 RB mid    | 20.88 | 19.68 |
|        |        | 1 RB high   | 20.78 | 19.56 |
|        |        | 50% RB low  | 20.81 | 19.84 |
|        |        | 50% RB mid  | 20.82 | 19.82 |
|        |        | 50% RB high | 20.83 | 19.82 |
|        |        | 100% RB     | 19.83 | 18.81 |
|        | 2647.5 | 1 RB low    | 21.74 | 21.01 |
|        |        | 1 RB mid    | 21.97 | 21.16 |
|        |        | 1 RB high   | 21.96 | 21.16 |
|        |        | 50% RB low  | 21.01 | 20.98 |
|        |        | 50% RB mid  | 21.97 | 21.02 |
|        |        | 50% RB high | 21.92 | 21.02 |
|        |        | 100% RB     | 20.98 | 19.99 |

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|        |        |             |       |       |
|--------|--------|-------------|-------|-------|
| 20 MHz | 2545.0 | 1 RB low    | 19.97 | 19.02 |
|        |        | 1 RB mid    | 20.28 | 19.34 |
|        |        | 1 RB high   | 19.98 | 19.04 |
|        |        | 50% RB low  | 19.20 | 18.23 |
|        |        | 50% RB mid  | 19.13 | 18.19 |
|        |        | 50% RB high | 19.16 | 18.21 |
|        |        | 100% RB     | 19.19 | 18.17 |
|        | 2590.0 | 1 RB low    | 20.42 | 18.96 |
|        |        | 1 RB mid    | 20.87 | 19.47 |
|        |        | 1 RB high   | 20.49 | 19.08 |
|        |        | 50% RB low  | 19.76 | 18.82 |
|        |        | 50% RB mid  | 19.77 | 18.80 |
|        |        | 50% RB high | 19.87 | 18.83 |
|        |        | 100% RB     | 19.68 | 18.79 |
|        | 2645.0 | 1 RB low    | 21.49 | 20.54 |
|        |        | 1 RB mid    | 22.03 | 21.10 |
|        |        | 1 RB high   | 21.82 | 20.87 |
|        |        | 50% RB low  | 20.82 | 19.85 |
|        |        | 50% RB mid  | 20.77 | 19.80 |
|        |        | 50% RB high | 20.98 | 20.02 |
|        |        | 100% RB     | 20.92 | 19.85 |

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## 4.1.2. Radiated Output Power

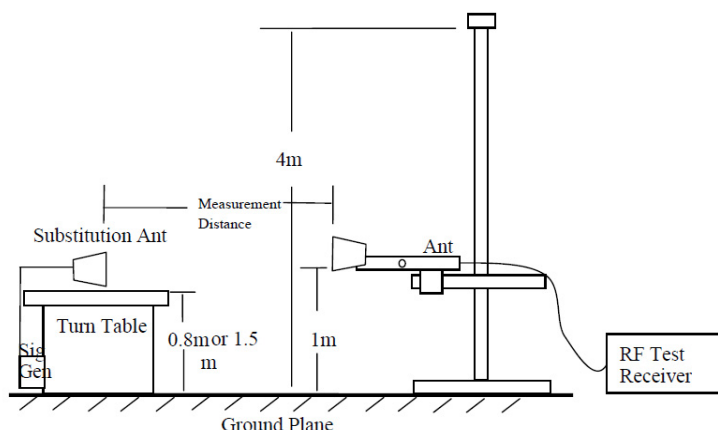
### LIMIT

This is the test for the maximum radiated power from the EUT.

### TEST CONFIGURATION

Radiated Power Measurement:

remark : 0.8m for below 1GHz, 1.5m for above 1GHz



### TEST PROCEDURE

The EUT was setup according to EIA/TIA 603D

- The EUT shall be placed at the specified height on a support, and in the position closest to normal use as declared by provider.
- The test antenna shall be oriented initially for vertical polarization and shall be chosen to correspond to the frequency of the transmitter.
- The output of the test antenna shall be connected to the measuring receiver.
- The transmitter shall be switched on and the measuring receiver shall be tuned to the frequency of the transmitter under test.
- The test antenna shall be raised and lowered through the specified range of height until a maximum signal level is detected by the measuring receiver.
- The transmitter shall then be rotated through 360° in the horizontal plane, until the maximum signal level is detected by the measuring receiver.
- The test antenna shall be raised and lowered again through the specified range of height until a maximum signal level is detected by the measuring receiver.
- The maximum signal level detected by the measuring receiver shall be noted.
- The transmitter shall be replaced by a substitution antenna.
- The substitution antenna shall be orientated for vertical polarization and the length of the substitution antenna shall be adjusted to correspond to the frequency of the transmitter.
- The substitution antenna shall be connected to a calibrated signal generator.
- If necessary, the input attenuator setting of the measuring receiver shall be adjusted in order to increase the sensitivity of the measuring receiver.
- The test antenna shall be raised and lowered through the specified range of height to ensure that the maximum signal is received.
- The input signal to the substitution antenna shall be adjusted to the level that produces a level detected by the measuring receiver, that is equal to the level noted while the transmitter radiated power was measured, corrected for the change of input attenuator setting of the measuring receiver.
- The measurement shall be repeated with the test antenna and the substitution antenna orientated for horizontal polarization.
- The measure of the effective radiated power is the larger of the two levels recorded at the input to the substitution antenna, corrected for gain of the substitution antenna if necessary.
- Test site anechoic chamber refer to ANSI C63.4.

## TEST RESULTS

### Radiated Measurement:

Remark:

1. We measured all RB Configuration refer 3GPP TS136 521 for each Channel Bandwidth of LTE Band 41; recorded worst case for each Channel Bandwidth of LTE Band 41.
2.  $EIRP = P_s(\text{dBm}) - P_{cl}(\text{dB}) + G_a(\text{dBi})$
3. We measured both Horizontal and Vertical direction, recorded worst case direction.

#### LTE Band 41 Channel Bandwidth 5MHz\_QPSK\_1RB#0

| Frequency (MHz) | $P_s$ (dBm) | $P_{cl}$ (dB) | $G_a$ Antenna Gain(dB) | Burst Average EIRP (dBm) | Limit (dBm) | Margin (dB) | Polarization |
|-----------------|-------------|---------------|------------------------|--------------------------|-------------|-------------|--------------|
| 2537.5          | 12.60       | 3.41          | 15.12                  | 24.31                    | 33.01       | 8.70        | V            |
| 2590.0          | 12.68       | 3.49          | 15.12                  | 24.31                    | 33.01       | 8.70        | V            |
| 2652.5          | 11.98       | 3.55          | 15.12                  | 23.55                    | 33.01       | 9.46        | V            |

#### LTE Band 41 Channel Bandwidth 10MHz\_QPSK\_1RB#0

| Frequency (MHz) | $P_s$ (dBm) | $P_{cl}$ (dB) | $G_a$ Antenna Gain(dB) | Burst Average EIRP (dBm) | Limit (dBm) | Margin (dB) | Polarization |
|-----------------|-------------|---------------|------------------------|--------------------------|-------------|-------------|--------------|
| 2540.0          | 11.88       | 3.41          | 15.12                  | 23.59                    | 33.01       | 9.42        | V            |
| 2590.0          | 12.77       | 3.49          | 15.12                  | 24.40                    | 33.01       | 8.61        | V            |
| 2650.0          | 11.05       | 3.55          | 15.12                  | 22.62                    | 33.01       | 10.39       | V            |

#### LTE Band 41 Channel Bandwidth 15MHz\_QPSK\_1RB#0

| Frequency (MHz) | $P_s$ (dBm) | $P_{cl}$ (dB) | $G_a$ Antenna Gain(dB) | Burst Average EIRP (dBm) | Limit (dBm) | Margin (dB) | Polarization |
|-----------------|-------------|---------------|------------------------|--------------------------|-------------|-------------|--------------|
| 2542.5          | 12.50       | 3.41          | 15.12                  | 24.21                    | 33.01       | 8.80        | V            |
| 2590.0          | 12.57       | 3.49          | 15.12                  | 24.20                    | 33.01       | 8.81        | V            |
| 2647.5          | 11.00       | 3.55          | 15.12                  | 22.57                    | 33.01       | 10.44       | V            |

#### LTE Band 41 Channel Bandwidth 20MHz\_QPSK\_1RB#0

| Frequency (MHz) | $P_s$ (dBm) | $P_{cl}$ (dB) | $G_a$ Antenna Gain(dB) | Burst Average EIRP (dBm) | Limit (dBm) | Margin (dB) | Polarization |
|-----------------|-------------|---------------|------------------------|--------------------------|-------------|-------------|--------------|
| 2545.0          | 12.09       | 3.41          | 15.12                  | 23.80                    | 33.01       | 9.21        | V            |
| 2590.0          | 13.57       | 3.49          | 15.12                  | 25.20                    | 33.01       | 7.81        | V            |
| 2645.0          | 10.96       | 3.55          | 15.12                  | 22.53                    | 33.01       | 10.48       | V            |

**LTE Band 41 Channel Bandwidth 5MHz 16QAM 1RB#0**

| Frequency (MHz) | P <sub>s</sub> (dBm) | P <sub>cl</sub> (dB) | G <sub>a</sub> Antenna Gain(dB) | Burst Average EIRP (dBm) | Limit (dBm) | Margin (dB) | Polarization |
|-----------------|----------------------|----------------------|---------------------------------|--------------------------|-------------|-------------|--------------|
| 2537.5          | 12.62                | 3.41                 | 15.12                           | 24.33                    | 33.01       | 8.68        | V            |
| 2590.0          | 12.95                | 3.49                 | 15.12                           | 24.58                    | 33.01       | 8.43        | V            |
| 2652.5          | 11.74                | 3.55                 | 15.12                           | 23.31                    | 33.01       | 9.70        | V            |

**LTE Band 41 Channel Bandwidth 10MHz 16QAM 1RB#0**

| Frequency (MHz) | P <sub>s</sub> (dBm) | P <sub>cl</sub> (dB) | G <sub>a</sub> Antenna Gain(dB) | Burst Average EIRP (dBm) | Limit (dBm) | Margin (dB) | Polarization |
|-----------------|----------------------|----------------------|---------------------------------|--------------------------|-------------|-------------|--------------|
| 2540.0          | 11.41                | 3.41                 | 15.12                           | 23.12                    | 33.01       | 9.89        | V            |
| 2590.0          | 13.03                | 3.49                 | 15.12                           | 24.66                    | 33.01       | 8.35        | V            |
| 2650.0          | 11.40                | 3.55                 | 15.12                           | 22.97                    | 33.01       | 10.04       | V            |

**LTE Band 41 Channel Bandwidth 15MHz 16QAM 1RB#0**

| Frequency (MHz) | P <sub>s</sub> (dBm) | P <sub>cl</sub> (dB) | G <sub>a</sub> Antenna Gain(dB) | Burst Average EIRP (dBm) | Limit (dBm) | Margin (dB) | Polarization |
|-----------------|----------------------|----------------------|---------------------------------|--------------------------|-------------|-------------|--------------|
| 2542.5          | 11.55                | 3.41                 | 15.12                           | 23.26                    | 33.01       | 9.75        | V            |
| 2590.0          | 12.53                | 3.49                 | 15.12                           | 24.16                    | 33.01       | 8.85        | V            |
| 2647.5          | 11.86                | 3.55                 | 15.12                           | 23.43                    | 33.01       | 9.58        | V            |

**LTE Band 41 Channel Bandwidth 20MHz 16QAM 1RB#0**

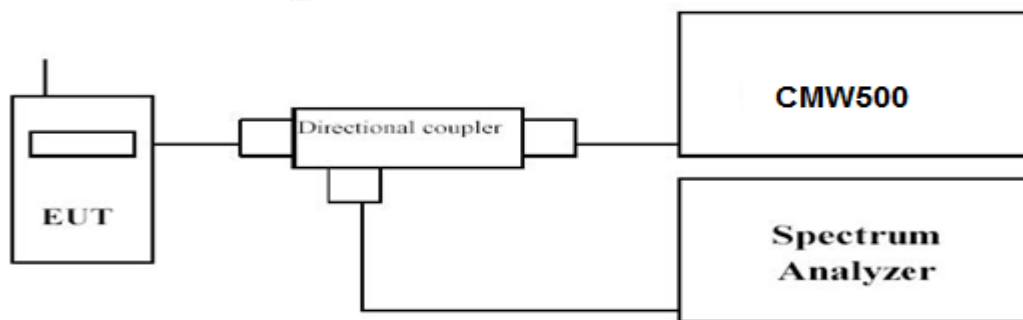
| Frequency (MHz) | P <sub>s</sub> (dBm) | P <sub>cl</sub> (dB) | G <sub>a</sub> Antenna Gain(dB) | Burst Average EIRP (dBm) | Limit (dBm) | Margin (dB) | Polarization |
|-----------------|----------------------|----------------------|---------------------------------|--------------------------|-------------|-------------|--------------|
| 2545.0          | 11.36                | 3.41                 | 15.12                           | 23.07                    | 33.01       | 9.94        | V            |
| 2590.0          | 12.72                | 3.49                 | 15.12                           | 24.35                    | 33.01       | 8.66        | V            |
| 2645.0          | 10.71                | 3.55                 | 15.12                           | 22.28                    | 33.01       | 10.73       | V            |

## 4.2 Peak-to-Average Ratio (PAR)

### LIMIT

The Peak-to-Average Ratio (PAR) of the transmission may not exceed 13 dB.

### TEST CONFIGURATION



### TEST PROCEDURE

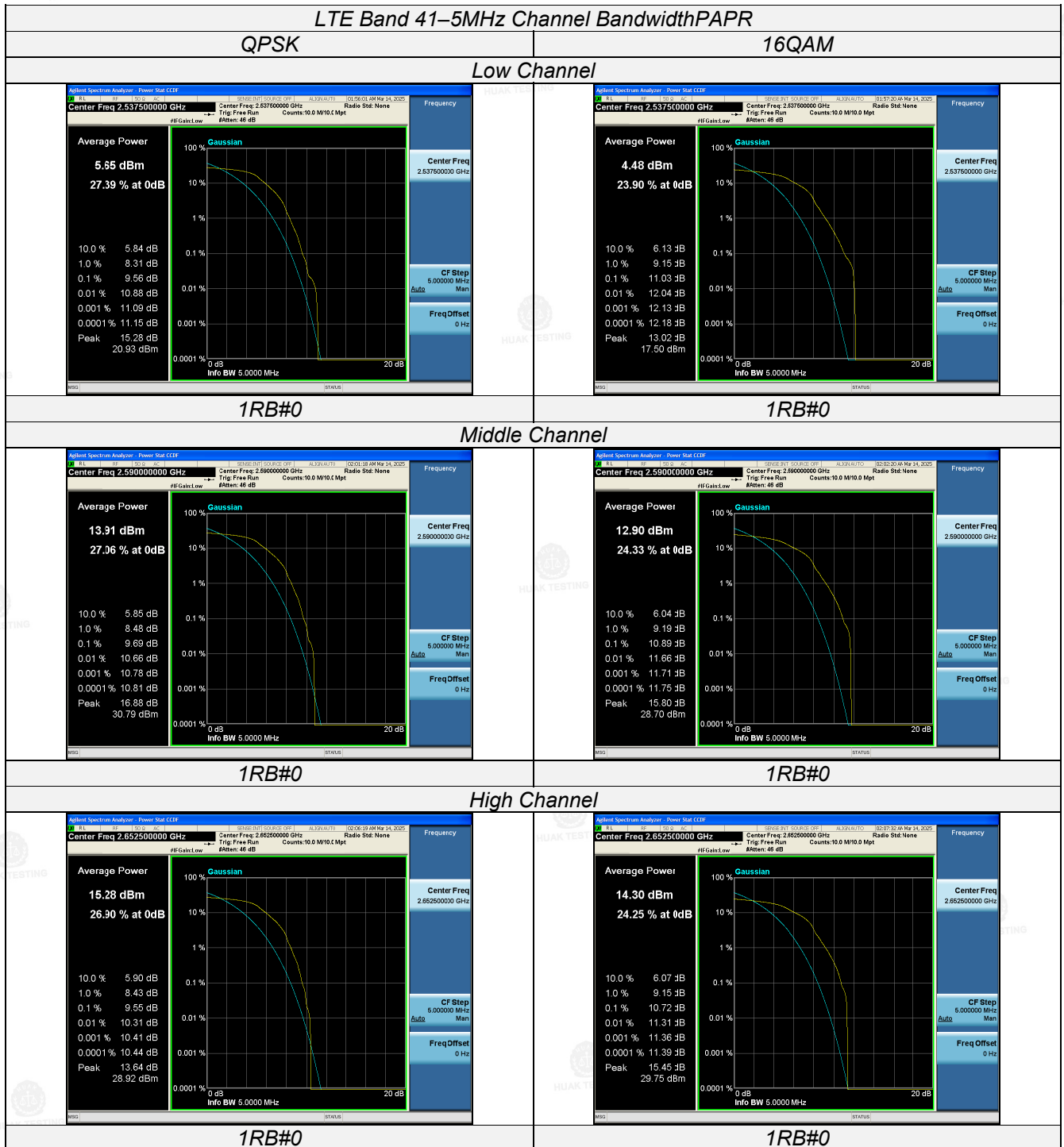
1. Refer to instrument's analyzer instruction manual for details on how to use the power statistics/CCDF function;
2. Set resolution/measurement bandwidth  $\geq$  signal's occupied bandwidth;
3. Set the number of counts to a value that stabilizes the measured CCDF curve;
4. Set the measurement interval as follows:
  - 1). for continuous transmissions, set to 1 ms,
  - 2). for burst transmissions, employ an external trigger that is synchronized with the EUT burst timing sequence, or use the internal burst trigger with a trigger level that allows the burst to stabilize and set the measurement interval to a time that is less than or equal to the burst duration.
5. Record the maximum PAPR level associated with a probability of 0.1%.

### TEST RESULTS

Remark:

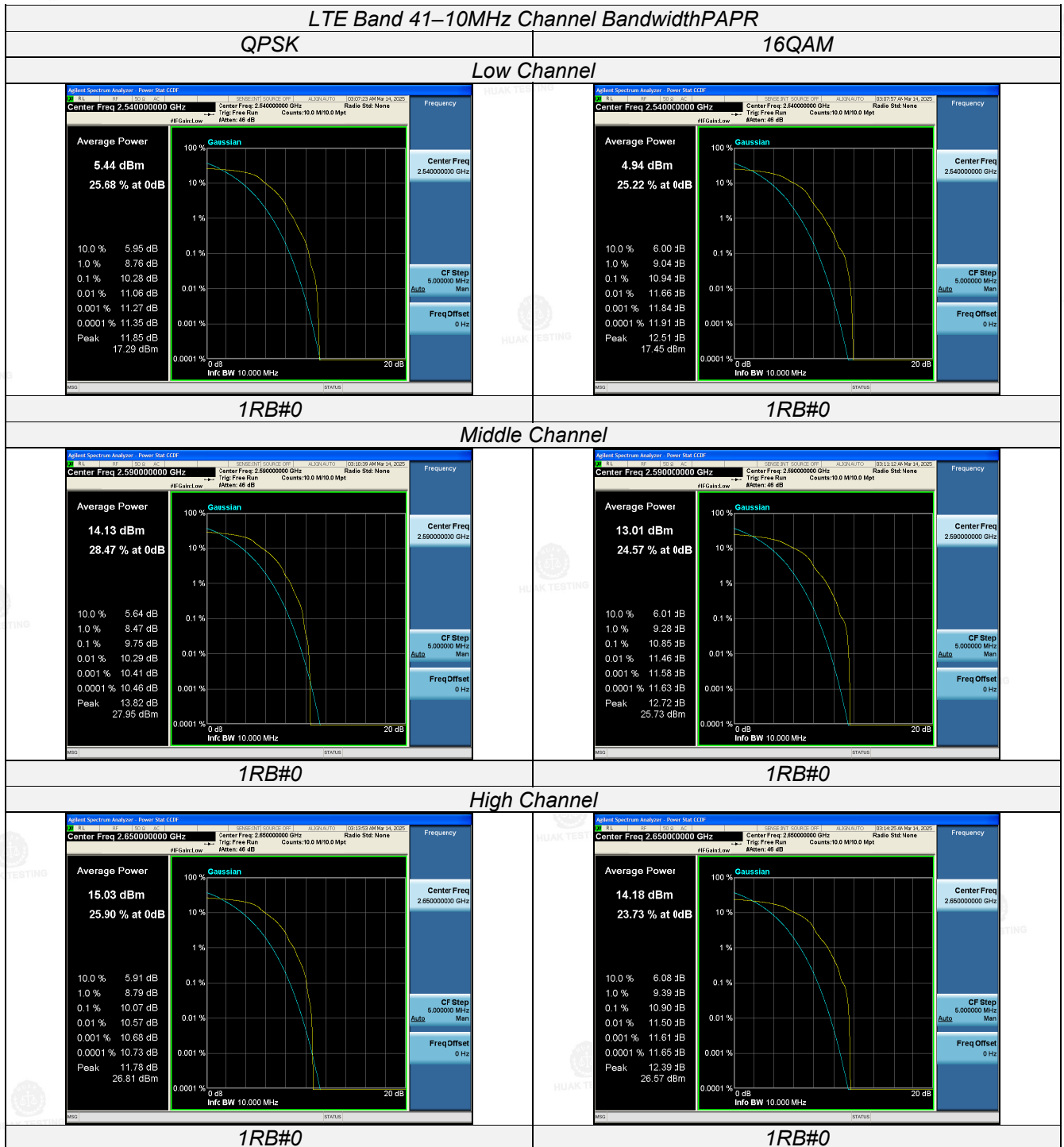
1. We measured all RB Configuration refer 3GPP TS136 521 for each Channel Bandwidth of LTE Band 41; recorded worst case for each Channel Bandwidth of LTE Band 41.

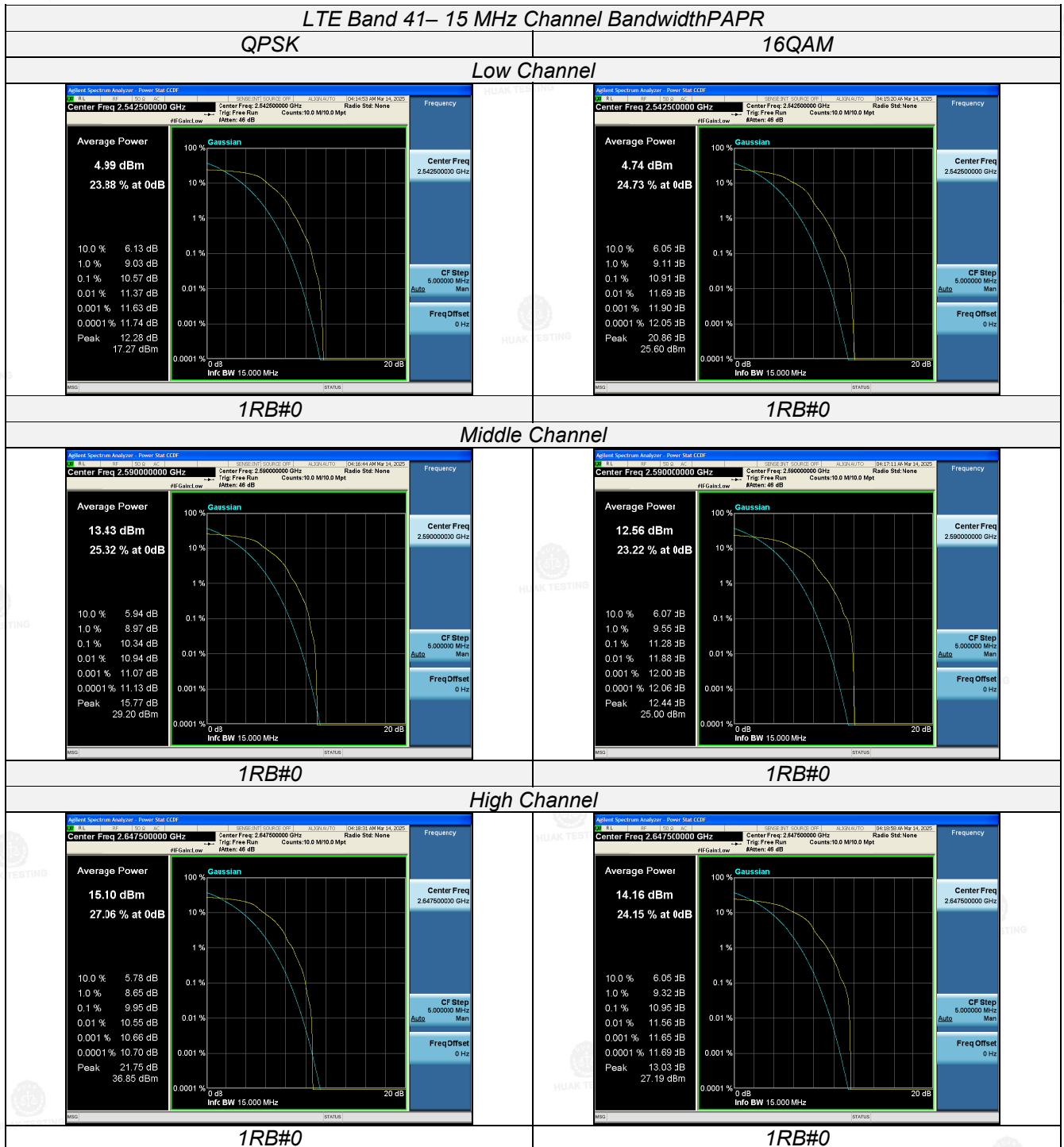
| LTE Band 41          |                 |                |          |       |
|----------------------|-----------------|----------------|----------|-------|
| TX Channel Bandwidth | Frequency (MHz) | RB Size/Offset | PAPR(dB) |       |
|                      |                 |                | QPSK     | 16QAM |
| 5 MHz                | 2537.5          | 1RB#0          | 9.56     | 11.03 |
|                      | 2590.0          |                | 9.69     | 10.89 |
|                      | 2652.5          |                | 9.55     | 10.72 |
| 10 MHz               | 2540.0          | 1RB#0          | 10.28    | 10.94 |
|                      | 2590.0          |                | 9.75     | 10.85 |
|                      | 2650.0          |                | 10.07    | 10.90 |
| 15 MHz               | 2542.5          | 1RB#0          | 10.57    | 10.91 |
|                      | 2590.0          |                | 10.34    | 11.28 |
|                      | 2647.5          |                | 9.95     | 10.95 |
| 20 MHz               | 2545.0          | 1RB#0          | 8.65     | 9.27  |
|                      | 2590.0          |                | 8.45     | 9.32  |
|                      | 2645.0          |                | 8.54     | 9.53  |

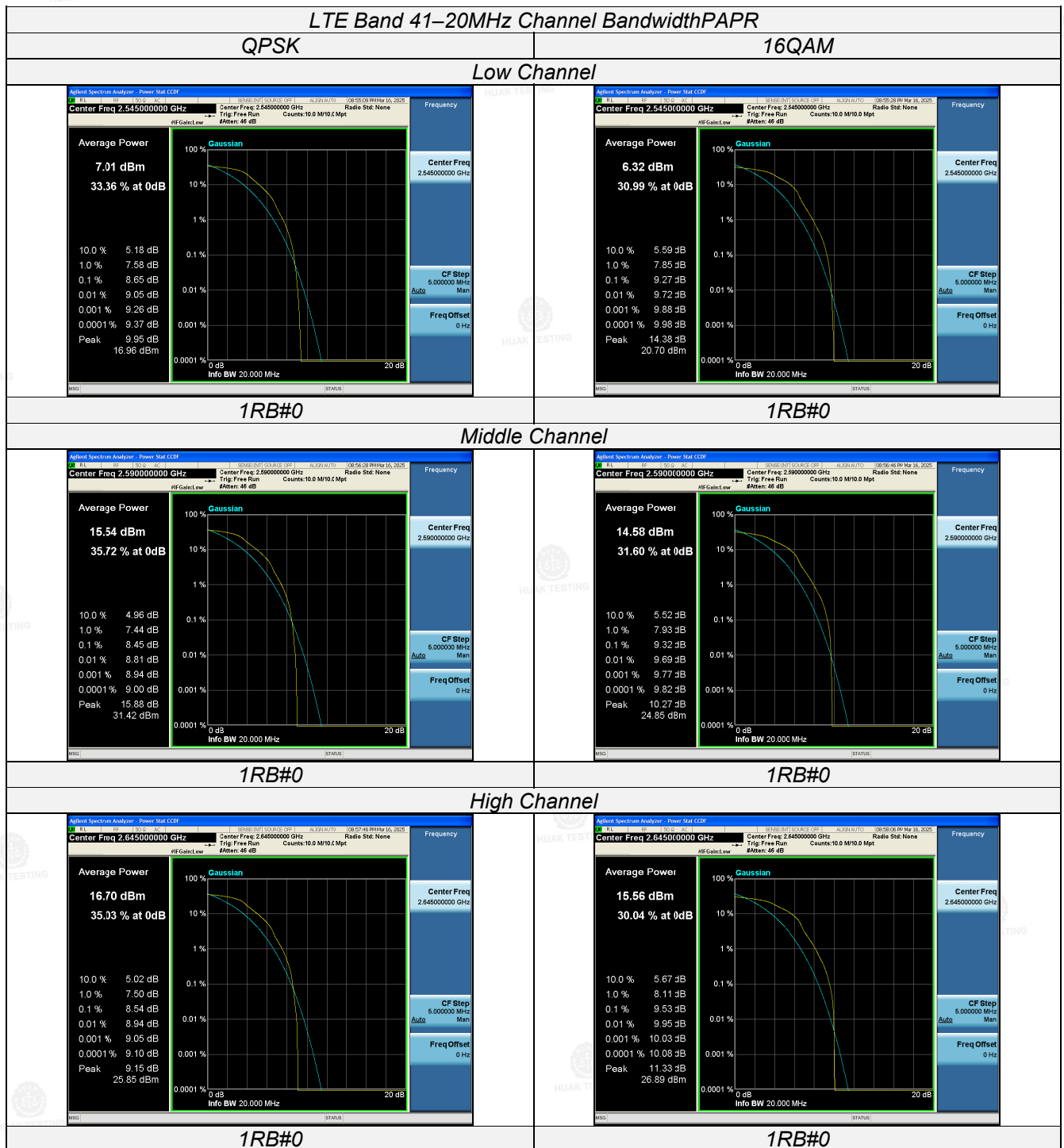


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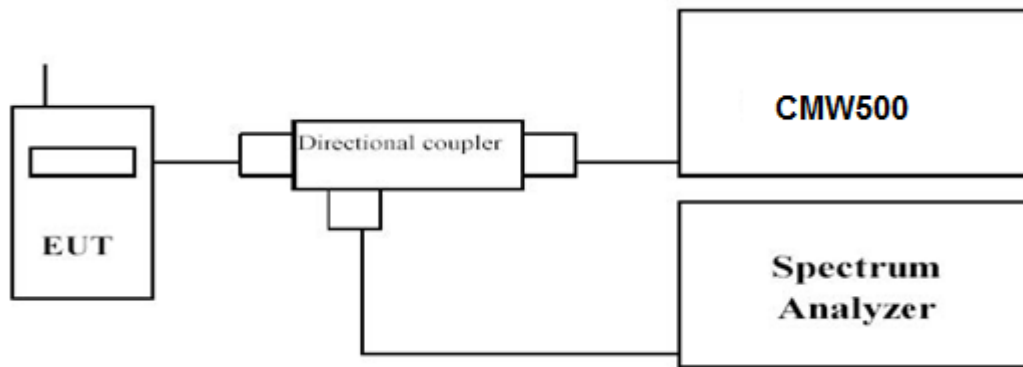


### 4.3 Occupied Bandwidth and Emission Bandwidth

#### LIMIT

N/A

#### TEST CONFIGURATION



#### TEST PROCEDURE

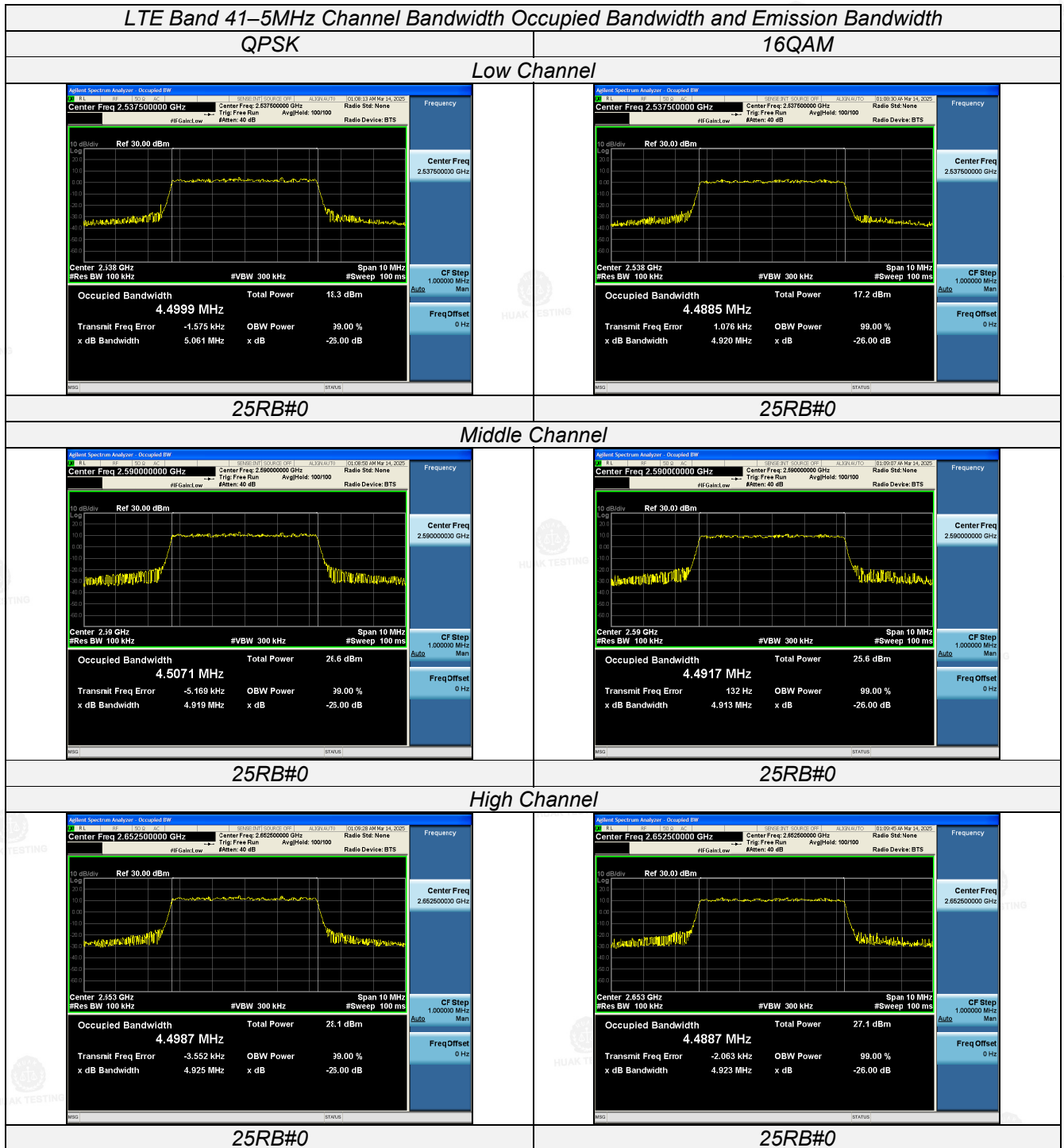
The transmitter output was connected to a calibrated coaxial cable and coupler, the other end of which was connected to a spectrum analyzer. The occupied bandwidth was measured with the spectrum analyzer at low, middle and high channel in each band. The -26dBc Emission bandwidth was also measured and recorded. Set RBW was set to about 1% of emission BW, VBW ≥ 3 times RBW. -26dBc display line was placed on the screen (or 99% bandwidth), the occupied bandwidth is the delta frequency between the two points where the display line intersects the signal trace.

#### TEST RESULTS

Remark:

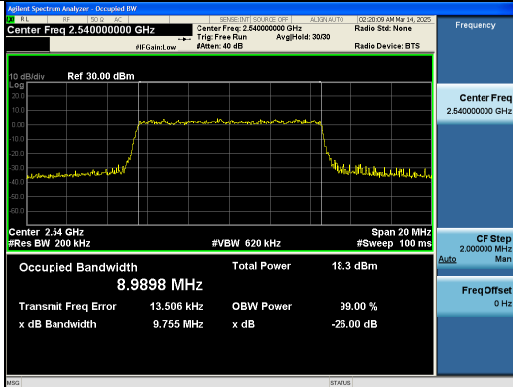
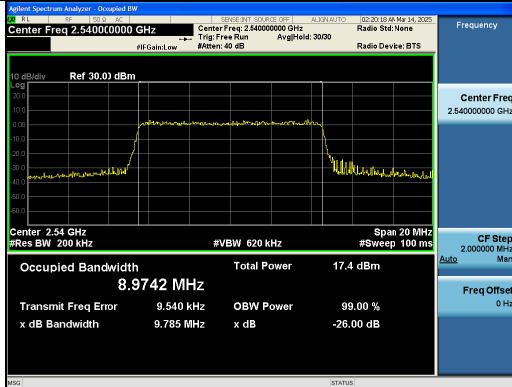
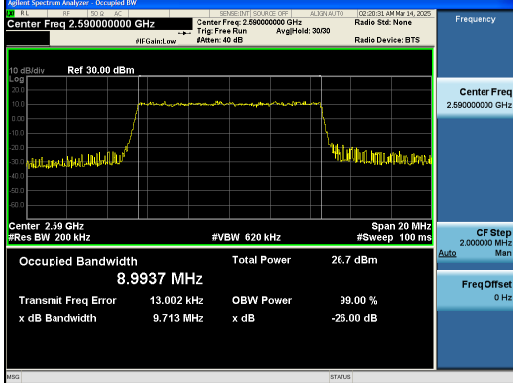
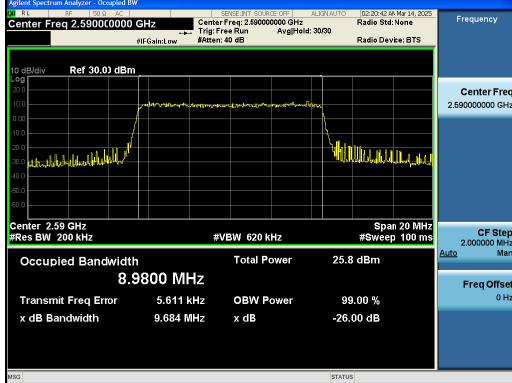
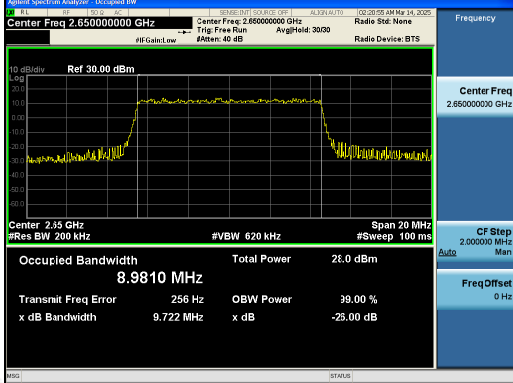
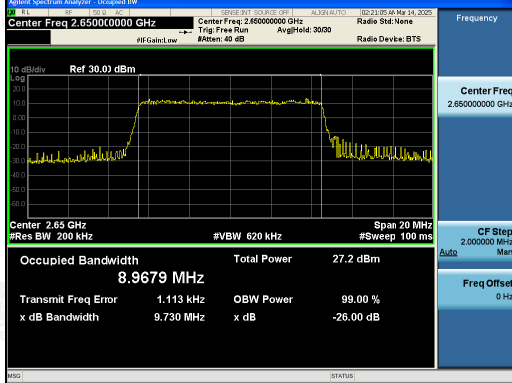
1. We were tested all RB Configuration refer 3GPP TS136 521 for each Channel Bandwidth of LTE Band 41; recorded worst case for each Channel Bandwidth of LTE Band 41.

| LTE Band 41          |                |                 |                              |        |                                 |       |
|----------------------|----------------|-----------------|------------------------------|--------|---------------------------------|-------|
| TX Channel Bandwidth | RB Size/Offset | Frequency (MHz) | 99% Occupied bandwidth (MHz) |        | -26dBc Emission bandwidth (MHz) |       |
|                      |                |                 | QPSK                         | 16QAM  | QPSK                            | 16QAM |
| 5 MHz                | 25RB#0         | 2537.5          | 4.4999                       | 4.4885 | 5.061                           | 4.920 |
|                      |                | 2590.0          | 4.5071                       | 4.4917 | 4.919                           | 4.913 |
|                      |                | 2652.5          | 4.4987                       | 4.4887 | 4.925                           | 4.923 |
| 10 MHz               | 50RB#0         | 2540.0          | 8.9898                       | 8.9742 | 9.755                           | 9.785 |
|                      |                | 2590.0          | 8.9937                       | 8.9800 | 9.713                           | 9.684 |
|                      |                | 2650.0          | 8.9810                       | 8.9679 | 9.722                           | 9.730 |
| 15 MHz               | 75RB#0         | 2542.5          | 13.489                       | 13.456 | 15.38                           | 14.58 |
|                      |                | 2590.0          | 13.473                       | 13.469 | 15.31                           | 14.57 |
|                      |                | 2647.5          | 13.478                       | 13.465 | 14.99                           | 14.65 |
| 20 MHz               | 100RB#0        | 2545.0          | 17.965                       | 17.955 | 19.40                           | 19.32 |
|                      |                | 2590.0          | 17.946                       | 17.925 | 19.24                           | 19.28 |
|                      |                | 2645.0          | 17.945                       | 17.935 | 19.30                           | 19.19 |

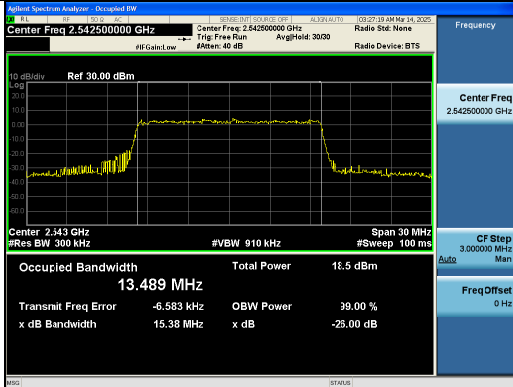
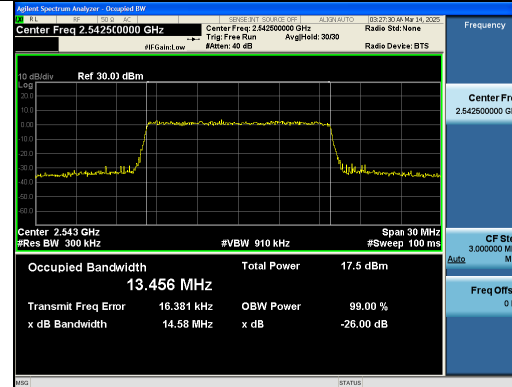
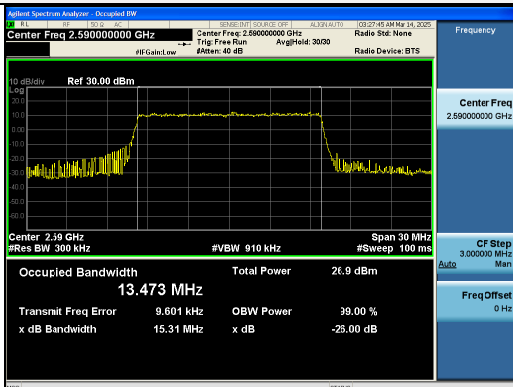
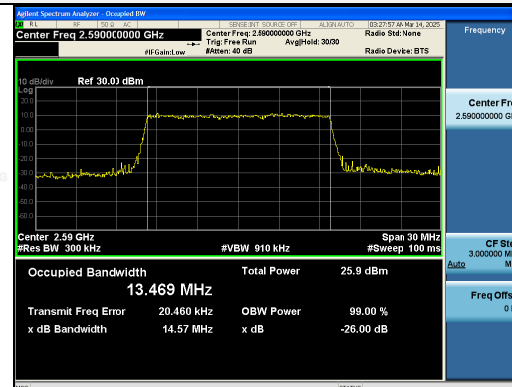
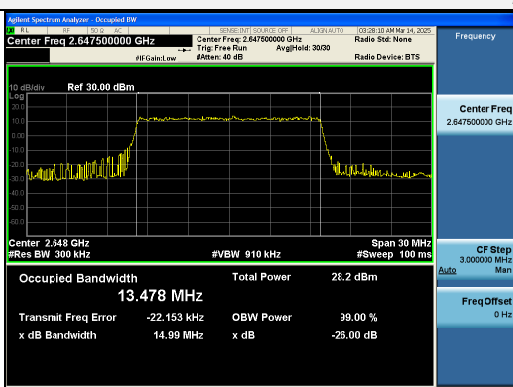
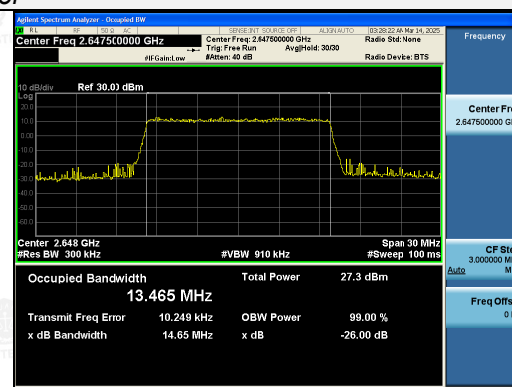


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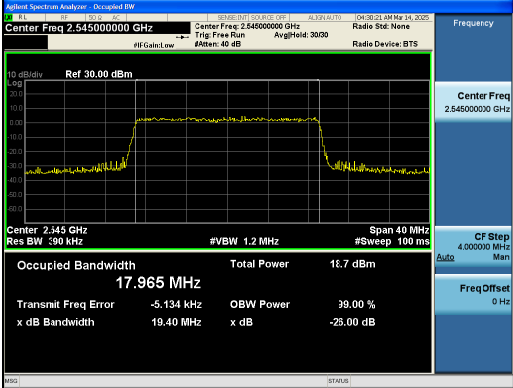
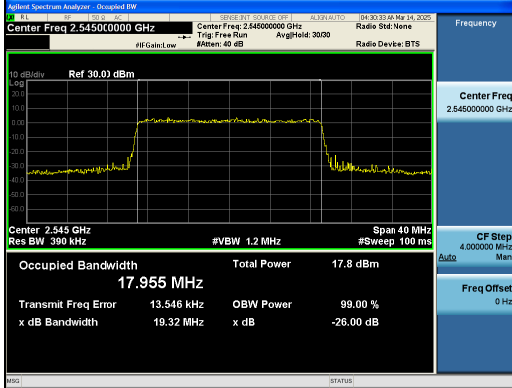
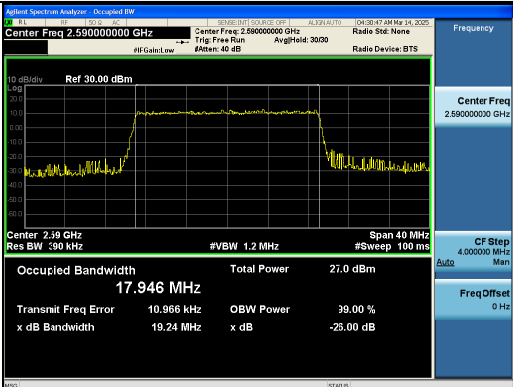
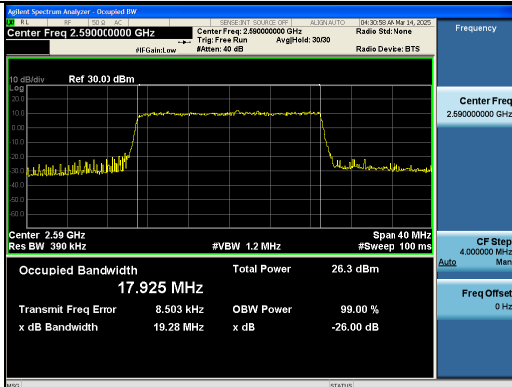
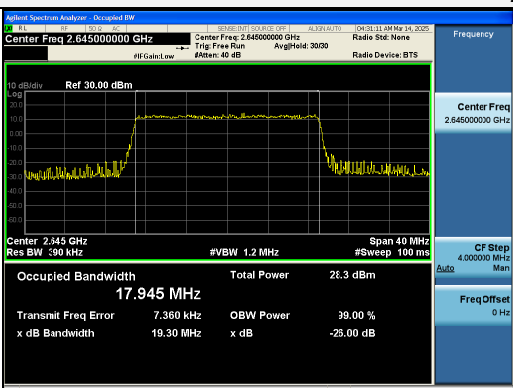
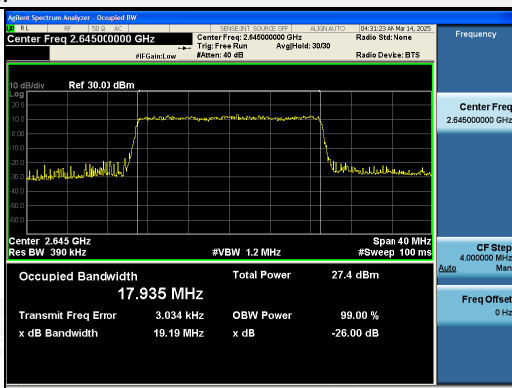
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| LTE Band 41-10MHz Channel Bandwidth Occupied Bandwidth and Emission Bandwidth       |  |                                                                                      |  |
|-------------------------------------------------------------------------------------|--|--------------------------------------------------------------------------------------|--|
| QPSK                                                                                |  | 16QAM                                                                                |  |
| Low Channel                                                                         |  |                                                                                      |  |
|    |  |    |  |
| 50RB#0                                                                              |  | 50RB#0                                                                               |  |
| Middle Channel                                                                      |  |                                                                                      |  |
|   |  |   |  |
| 50RB#0                                                                              |  | 50RB#0                                                                               |  |
| High Channel                                                                        |  |                                                                                      |  |
|  |  |  |  |
| 50RB#0                                                                              |  | 50RB#0                                                                               |  |

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| LTE Band 41-15MHz Channel Bandwidth Occupied Bandwidth and Emission Bandwidth       |  |                                                                                      |  |
|-------------------------------------------------------------------------------------|--|--------------------------------------------------------------------------------------|--|
| QPSK                                                                                |  | 16QAM                                                                                |  |
| Low Channel                                                                         |  |                                                                                      |  |
|    |  |    |  |
| 75RB#0                                                                              |  | 75RB#0                                                                               |  |
| Middle Channel                                                                      |  |                                                                                      |  |
|   |  |   |  |
| 75RB#0                                                                              |  | 75RB#0                                                                               |  |
| High Channel                                                                        |  |                                                                                      |  |
|  |  |  |  |
| 75RB#0                                                                              |  | 75RB#0                                                                               |  |

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| LTE Band 41-20MHz Channel Bandwidth Occupied Bandwidth and Emission Bandwidth                                                                                                                                                                                                                                                                                                  |                                                                                                                                                                                                                                                                                                                                                                                 |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| QPSK                                                                                                                                                                                                                                                                                                                                                                           | 16QAM                                                                                                                                                                                                                                                                                                                                                                           |
| Low Channel                                                                                                                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                                                                                                                 |
|  <p>Agilent Spectrum Analyzer - Occupied BW</p> <p>Center Freq 2.545000000 GHz</p> <p>Ref 30.0 dBm</p> <p>Occupied Bandwidth 17.965 MHz</p> <p>Total Power 15.7 dBm</p> <p>Transmit Freq Error -5.134 kHz</p> <p>OBW Power 39.00 %</p> <p>x dB Bandwidth 19.40 MHz</p> <p>x dB -25.00 dB</p>  |  <p>Agilent Spectrum Analyzer - Occupied BW</p> <p>Center Freq 2.545000000 GHz</p> <p>Ref 30.0 dBm</p> <p>Occupied Bandwidth 17.955 MHz</p> <p>Total Power 17.8 dBm</p> <p>Transmit Freq Error 13.546 kHz</p> <p>OBW Power 99.00 %</p> <p>x dB Bandwidth 19.32 MHz</p> <p>x dB -26.00 dB</p>  |
| 100RB#0                                                                                                                                                                                                                                                                                                                                                                        | 100RB#0                                                                                                                                                                                                                                                                                                                                                                         |
| Middle Channel                                                                                                                                                                                                                                                                                                                                                                 |                                                                                                                                                                                                                                                                                                                                                                                 |
|  <p>Agilent Spectrum Analyzer - Occupied BW</p> <p>Center Freq 2.590000000 GHz</p> <p>Ref 30.0 dBm</p> <p>Occupied Bandwidth 17.946 MHz</p> <p>Total Power 21.0 dBm</p> <p>Transmit Freq Error 10.966 kHz</p> <p>OBW Power 39.00 %</p> <p>x dB Bandwidth 19.24 MHz</p> <p>x dB -25.00 dB</p> |  <p>Agilent Spectrum Analyzer - Occupied BW</p> <p>Center Freq 2.590000000 GHz</p> <p>Ref 30.0 dBm</p> <p>Occupied Bandwidth 17.925 MHz</p> <p>Total Power 26.3 dBm</p> <p>Transmit Freq Error 8.503 kHz</p> <p>OBW Power 99.00 %</p> <p>x dB Bandwidth 19.28 MHz</p> <p>x dB -26.00 dB</p>  |
| 100RB#0                                                                                                                                                                                                                                                                                                                                                                        | 100RB#0                                                                                                                                                                                                                                                                                                                                                                         |
| High Channel                                                                                                                                                                                                                                                                                                                                                                   |                                                                                                                                                                                                                                                                                                                                                                                 |
|  <p>Agilent Spectrum Analyzer - Occupied BW</p> <p>Center Freq 2.645000000 GHz</p> <p>Ref 30.0 dBm</p> <p>Occupied Bandwidth 17.945 MHz</p> <p>Total Power 25.3 dBm</p> <p>Transmit Freq Error 7.360 kHz</p> <p>OBW Power 39.00 %</p> <p>x dB Bandwidth 19.30 MHz</p> <p>x dB -25.00 dB</p> |  <p>Agilent Spectrum Analyzer - Occupied BW</p> <p>Center Freq 2.645000000 GHz</p> <p>Ref 30.0 dBm</p> <p>Occupied Bandwidth 17.935 MHz</p> <p>Total Power 27.4 dBm</p> <p>Transmit Freq Error 3.034 kHz</p> <p>OBW Power 99.00 %</p> <p>x dB Bandwidth 19.19 MHz</p> <p>x dB -26.00 dB</p> |
| 100RB#0                                                                                                                                                                                                                                                                                                                                                                        | 100RB#0                                                                                                                                                                                                                                                                                                                                                                         |

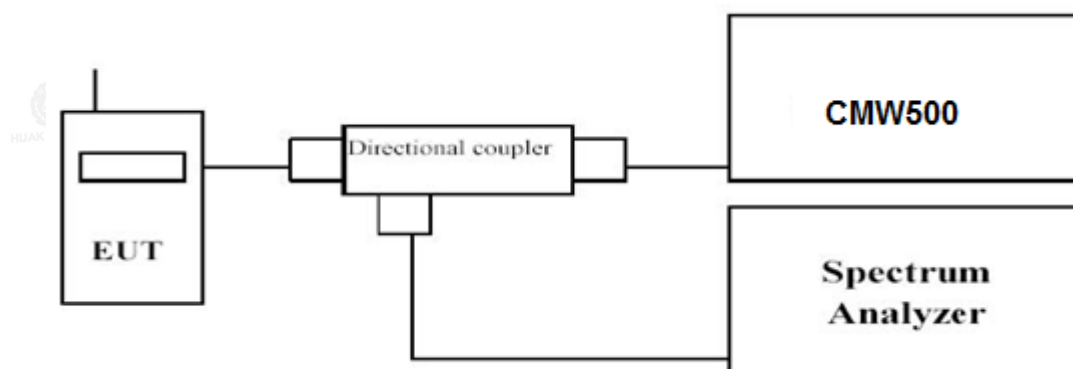
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## 4.4 Band Edge compliance

### LIMIT

the power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitting power (P) by a factor of at least  $40 + 10 \log P$  dB ( $-10$  dBm,  $100$  nW) on all frequencies between the channel edge and  $5$  MHz from the channel edge,  $43 + 10 \log P$  dB ( $-13$  dBm,  $50$  nW) on all frequencies between  $5$  MHz and  $X$  MHz from the channel edge, and  $55 + 10 \log P$  dB ( $-25$  dBm,  $3$  nW) on all frequencies more than  $20$  MHz from the channel edge, where  $X$  MHz is the greater of  $6$  MHz or the actual emission bandwidth (26 dB).

### TEST CONFIGURATION



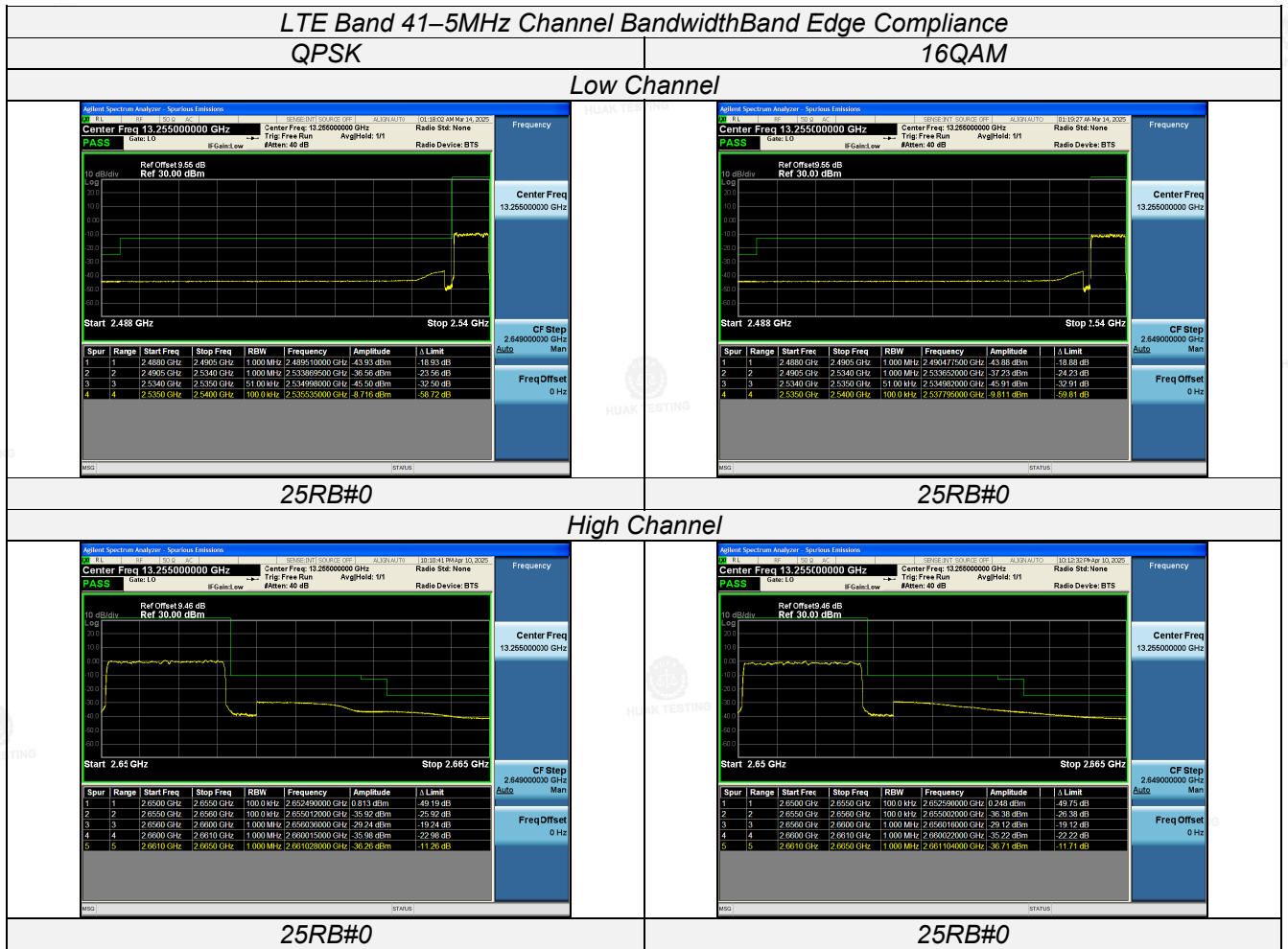
### TEST PROCEDURE

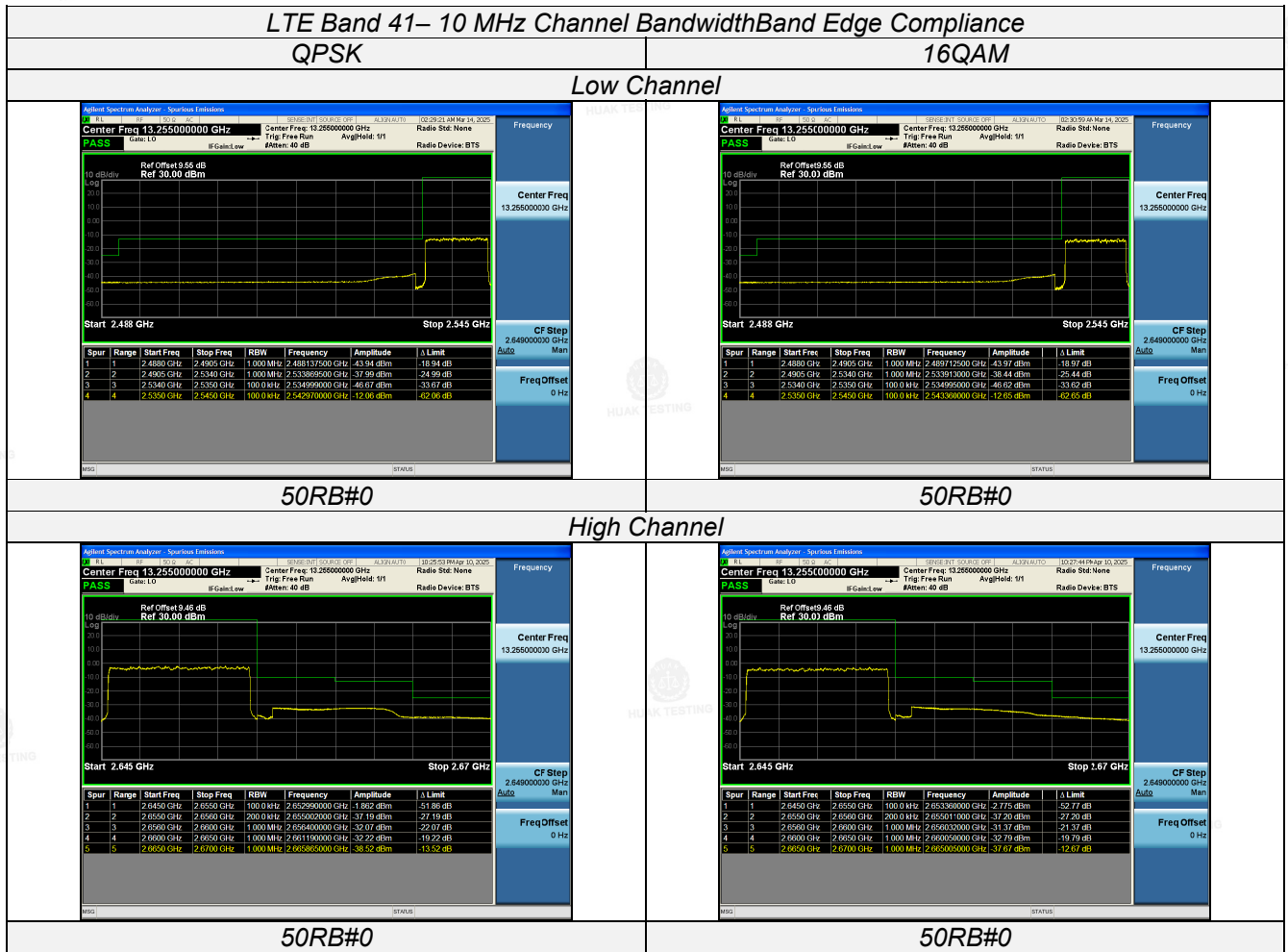
1. The transmitter output port was connected to base station.
2. The RF output of EUT was connected to the power meter by RF cable and attenuator, the path loss was compensated to the results for each measurement.
3. Set EUT at maximum power through base station.
4. Select lowest and highest channels for each band and different modulation.
5. Measure Band edge using RMS (Average) detector by spectrum
6. Set RBW =  $100$  kHz, VBW =  $300$  kHz, Span =  $50$  MHz Peak Detector.

### TEST RESULTS

Remark:

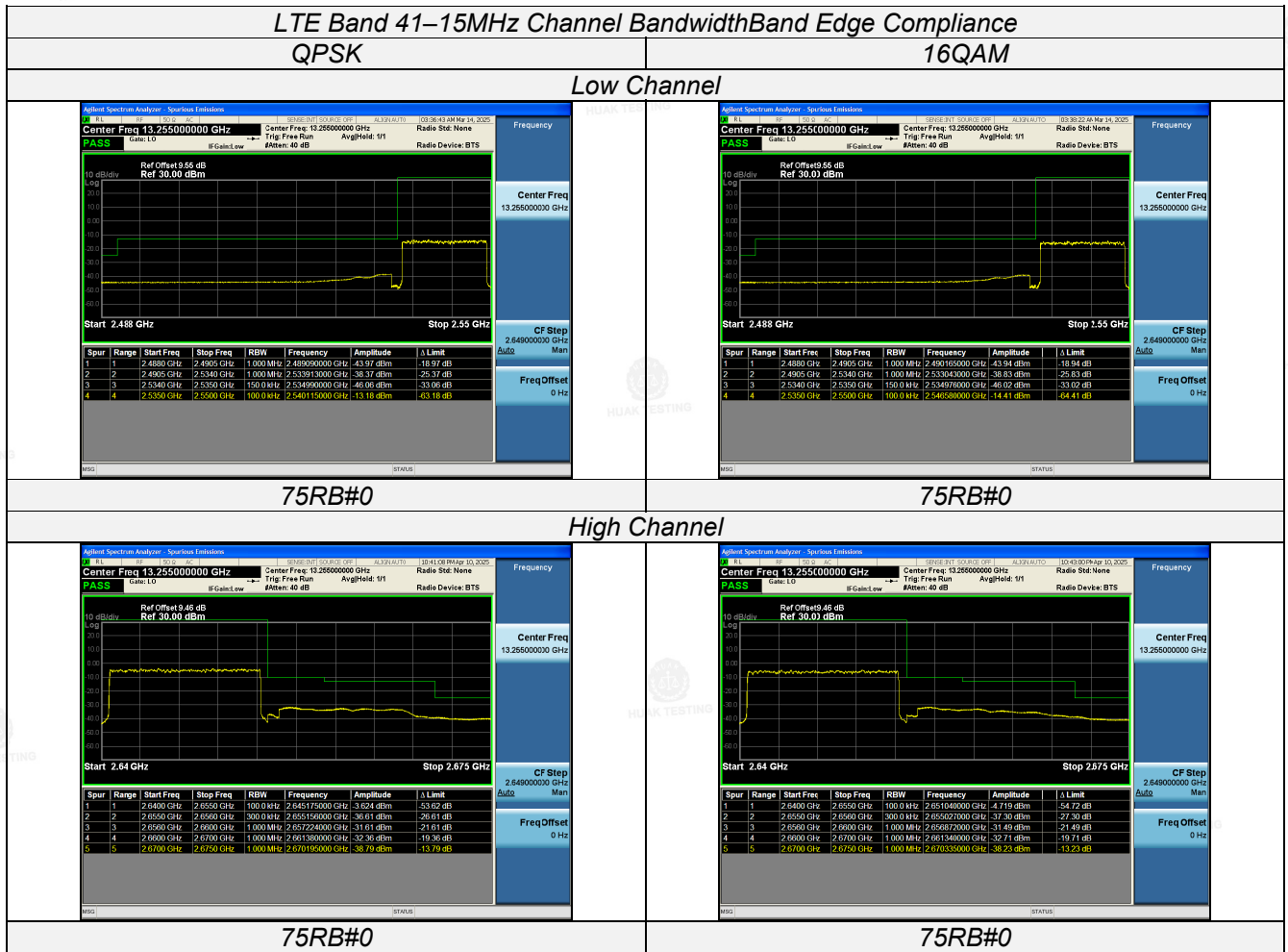
1. We were tested all RB Configuration refer 3GPP TS136 521 for each Channel Bandwidth of LTE Band 41; recorded worst case for each Channel Bandwidth of LTE Band 41.





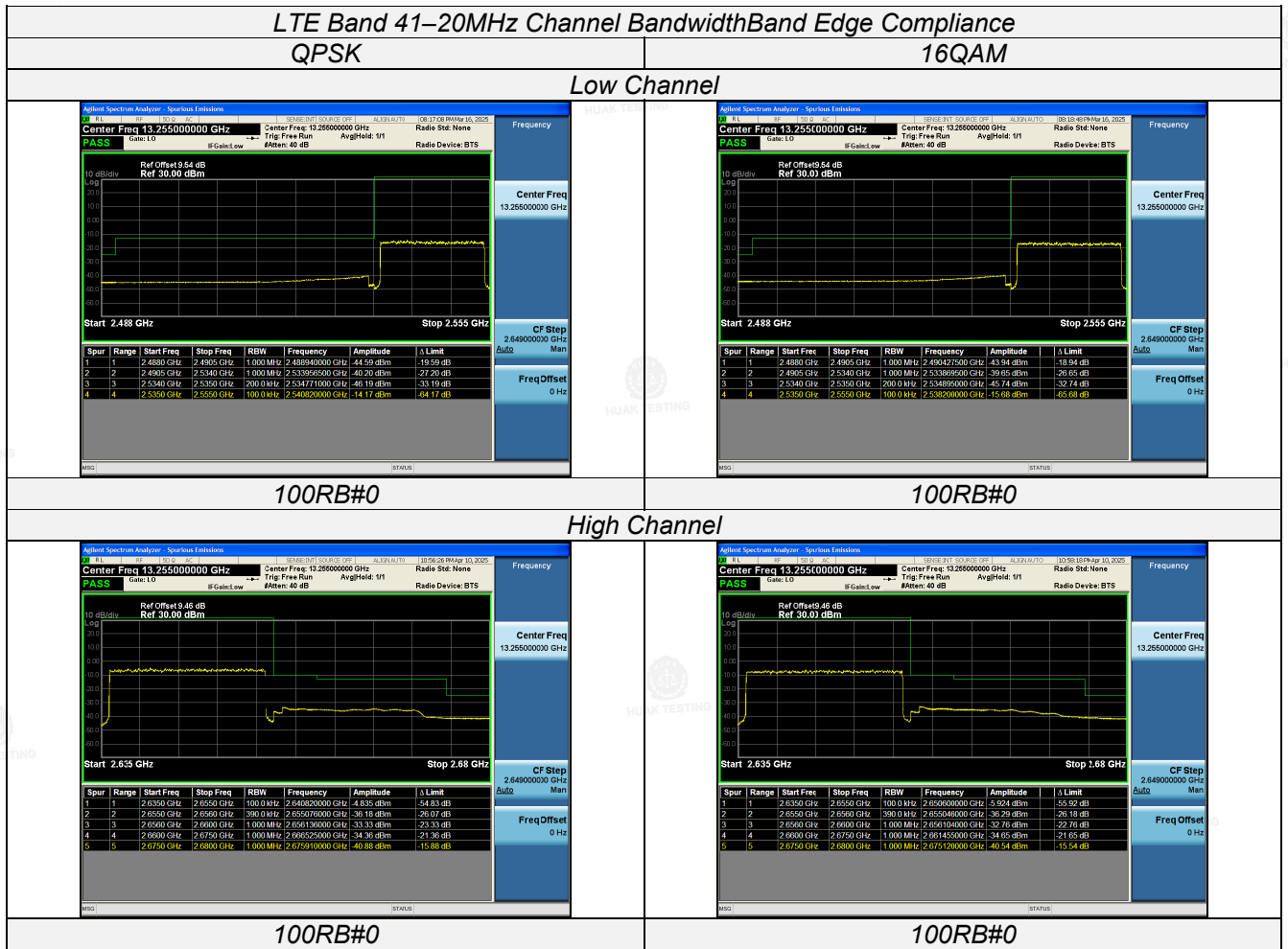
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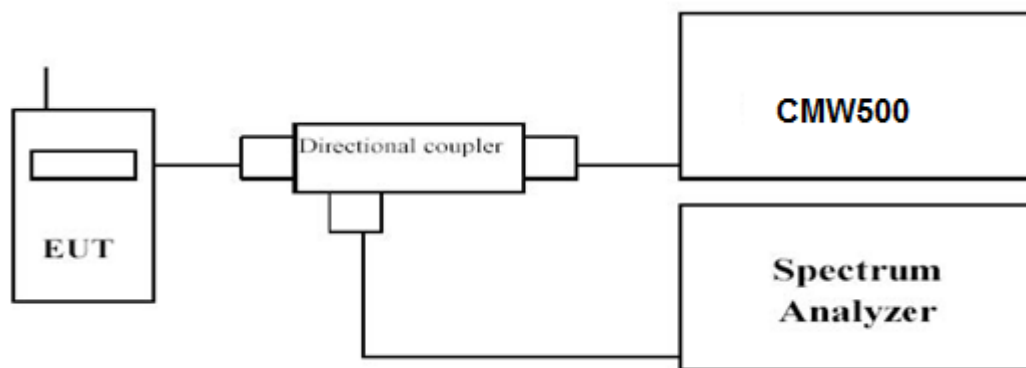
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## 4.5 Spurious Emissions Antenna Port

### LIMIT

The power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitting power (P) by a factor of at least  $40 + 10 \log P$  dB (–10 dBm, 100 nW) on all frequencies between the channel edge and 5 MHz from the channel edge,  $43 + 10 \log P$  dB (–13 dBm, 50 nW) on all frequencies between 5 MHz and X MHz from the channel edge, and  $55 + 10 \log P$  dB (–25 dBm, 3 nW) on all frequencies more than 20 MHz from the channel edge, where X MHz is the greater of 6 MHz or the actual emission bandwidth (26 dB).

### TEST CONFIGURATION



### TEST PROCEDURE

The EUT was setup according to EIA/TIA 603D

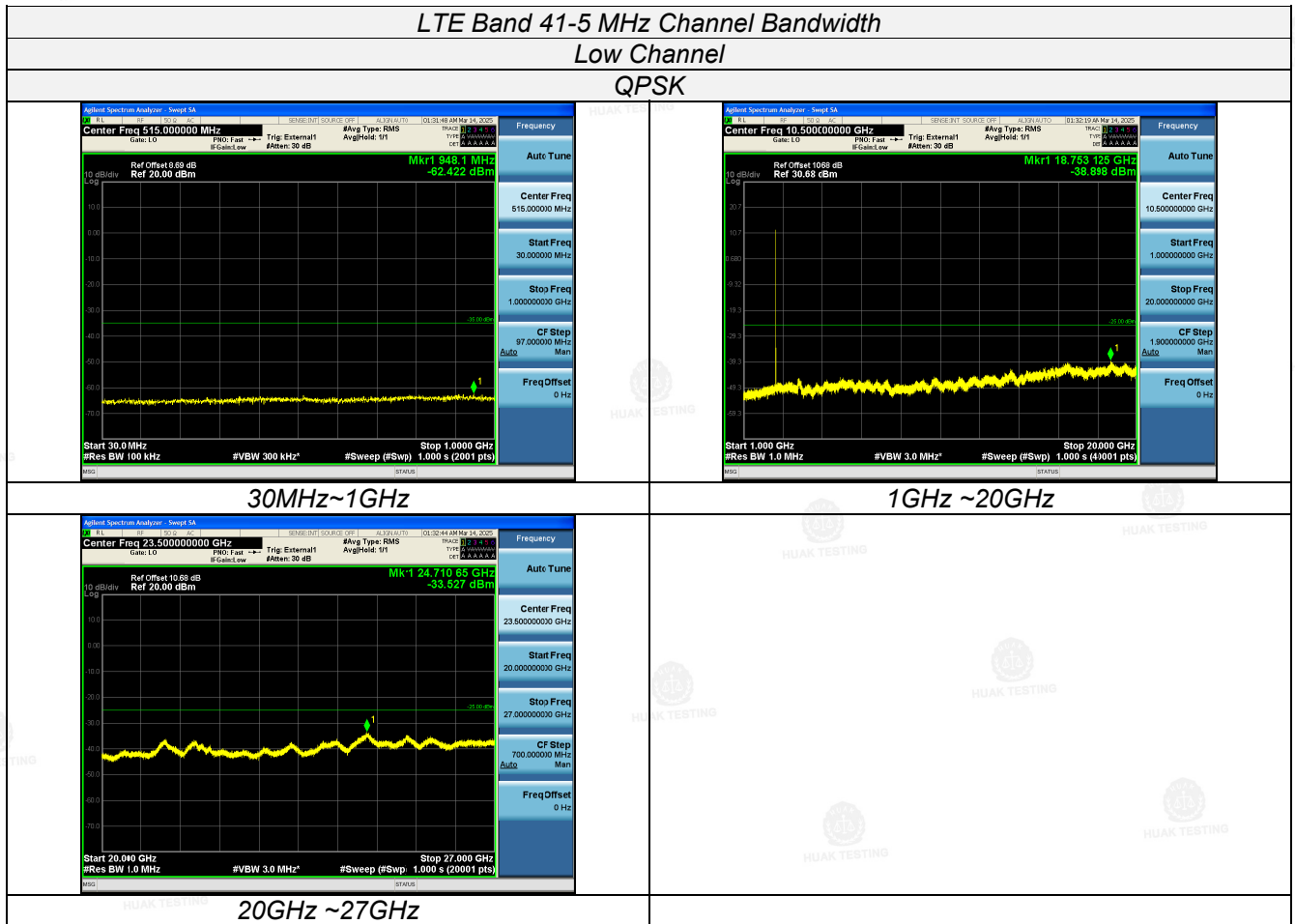
- Place the EUT on a bench and set it in transmitting mode.
- Connect a low loss RF cable from the antenna port to a spectrum analyzer and CMW500 by a Directional Coupler.
- EUT Communicate with CMW500, then select a channel for testing.
- Add a correction factor to the display of spectrum, and then test.
- The resolution bandwidth of the spectrum analyzer was set sufficient scans were taken to show the out of band Emission if any up to 10<sup>th</sup> harmonic.
- Please refer to following tables for test antenna conducted emissions.

| Working Frequency | Sub range (GHz) | RBW     | VBW     | Sweep time (s) |
|-------------------|-----------------|---------|---------|----------------|
| LTE Band 41       | 0.03~1          | 100 KHz | 300 KHz | Auto           |
|                   | 1~27            | 1 MHz   | 3 MHz   | Auto           |

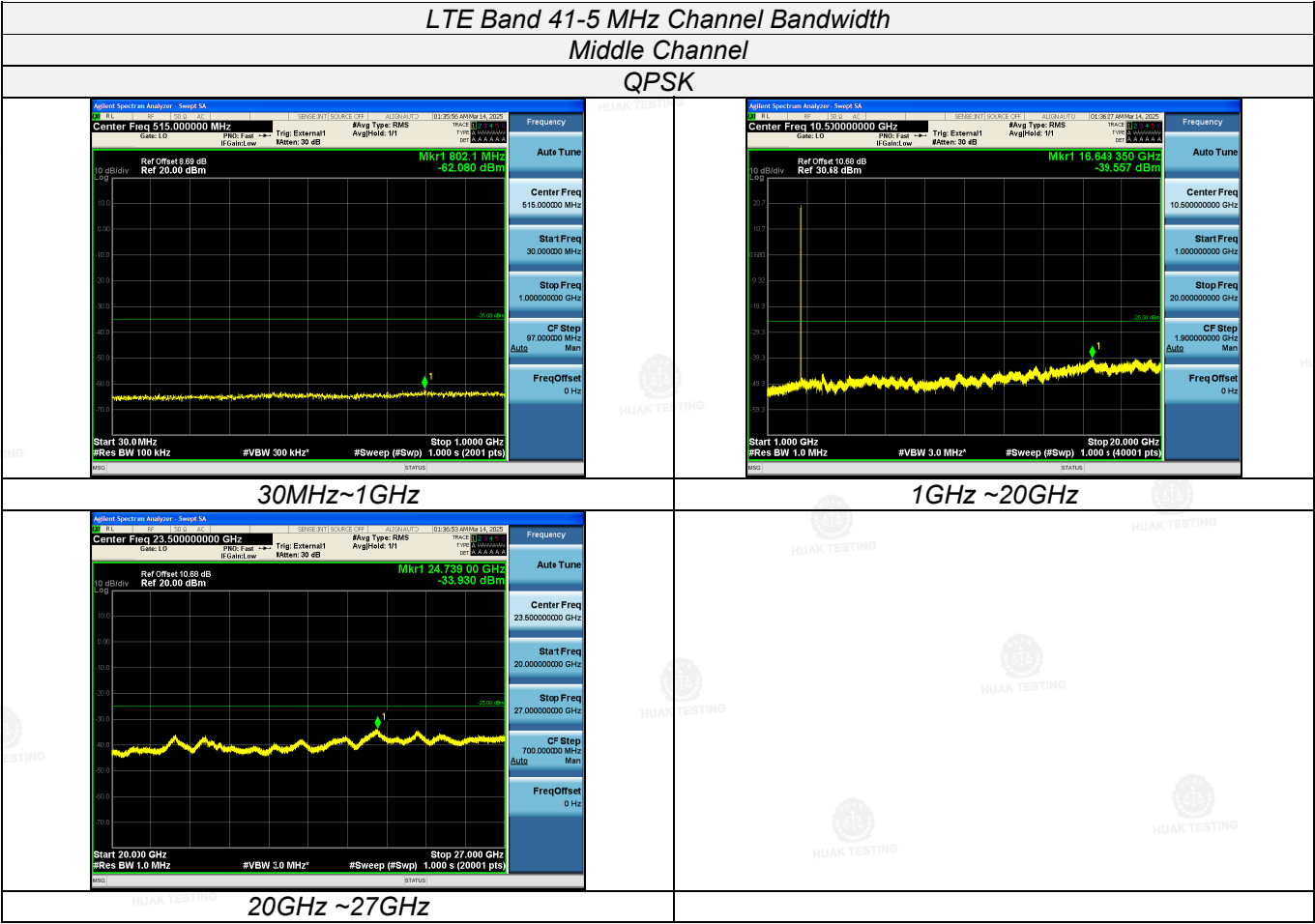
### TEST RESULTS

Remark:

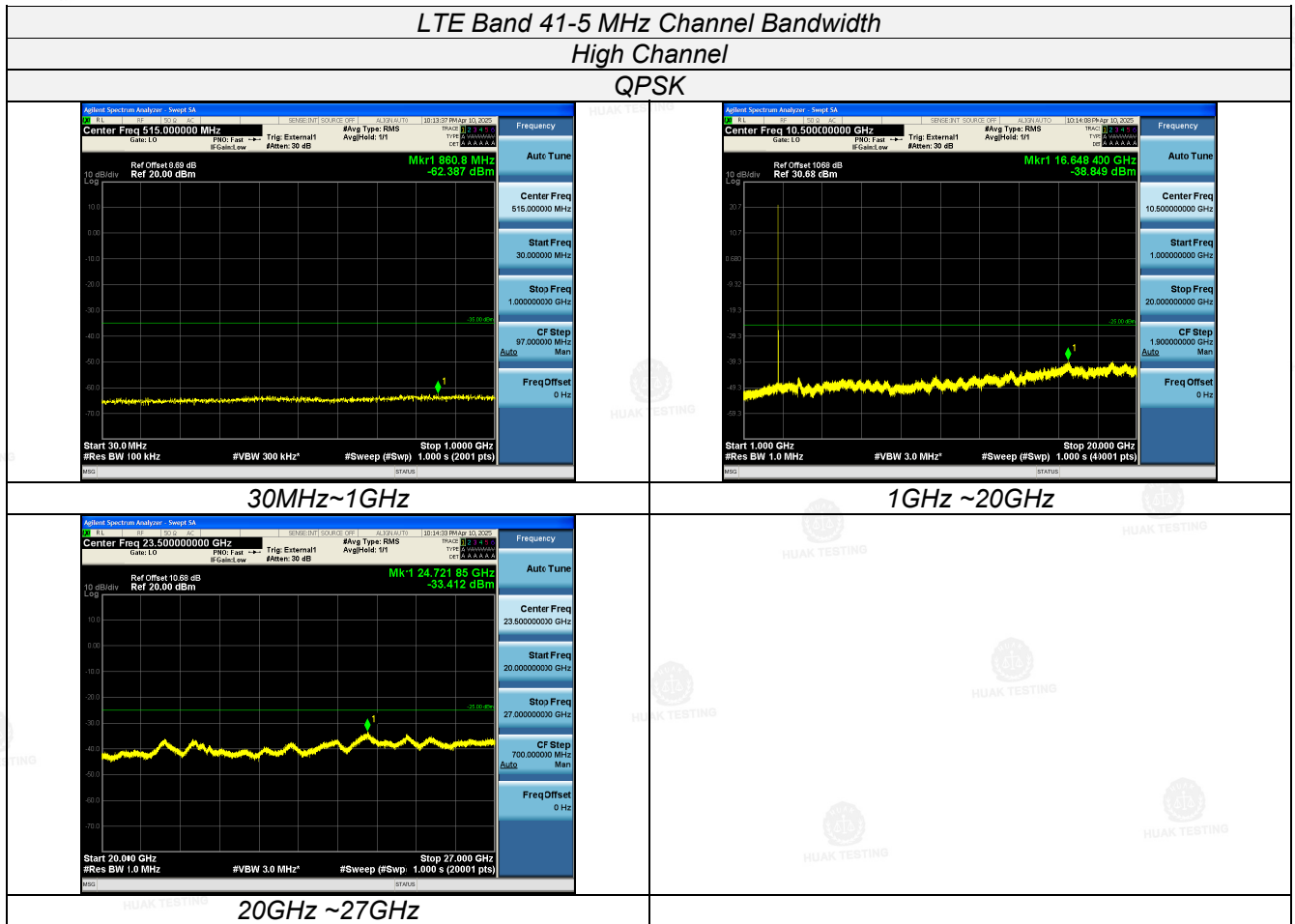
- We were tested all RB Configuration refer 3GPP TS136 521 for each Channel Bandwidth of LTE Band 41; recorded worst case at the QPSK Mode for each Channel Bandwidth of LTE Band 41



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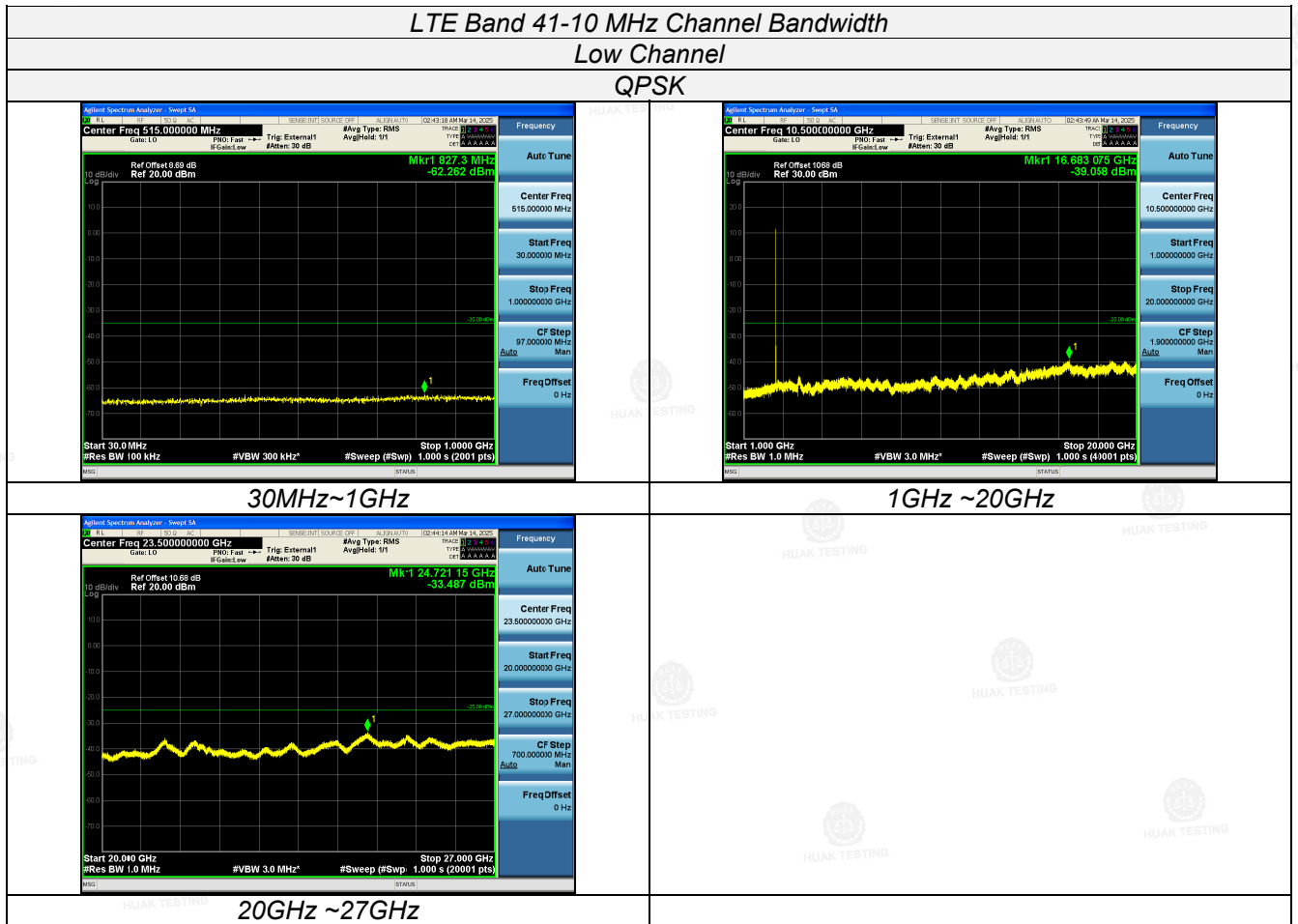


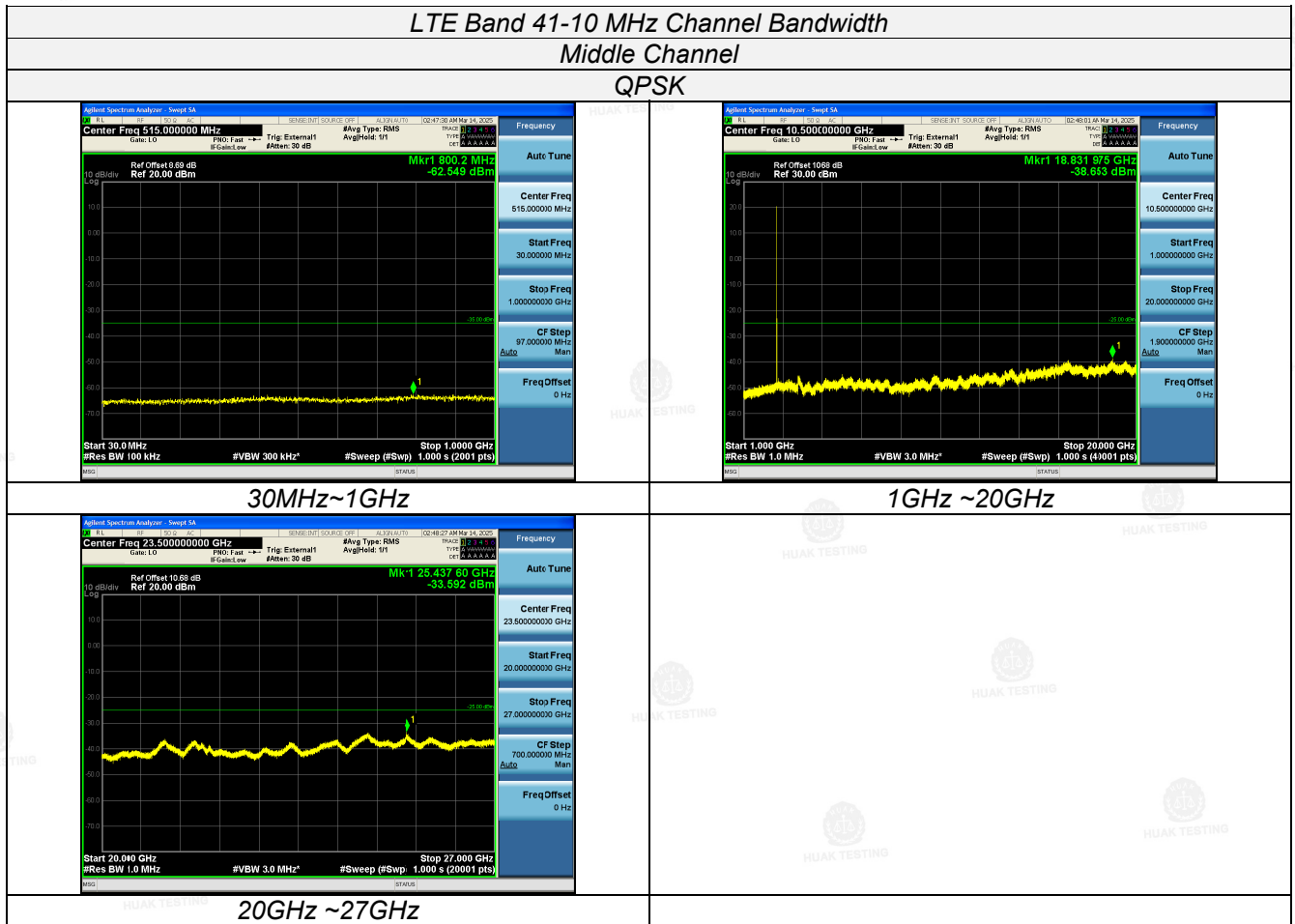
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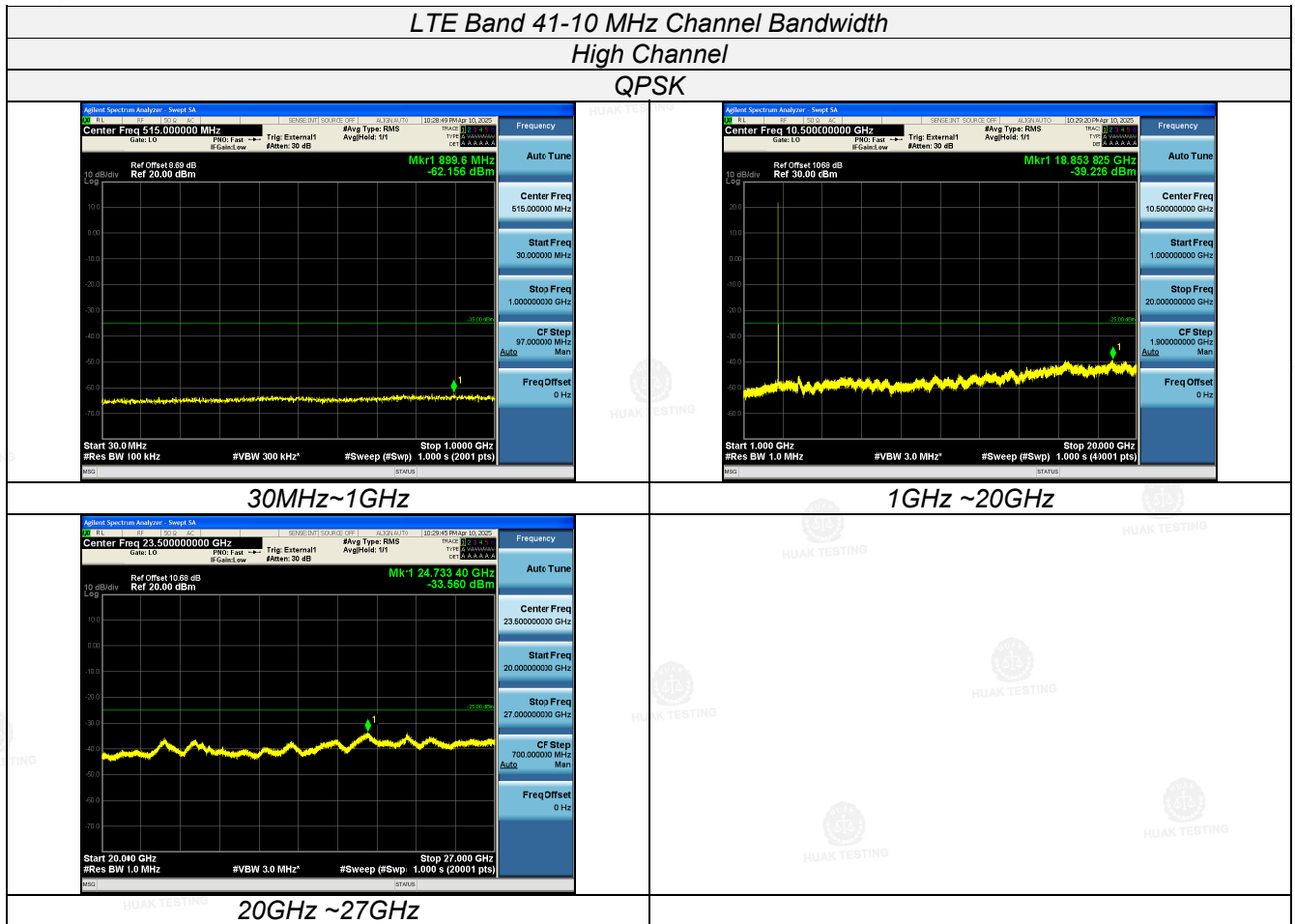


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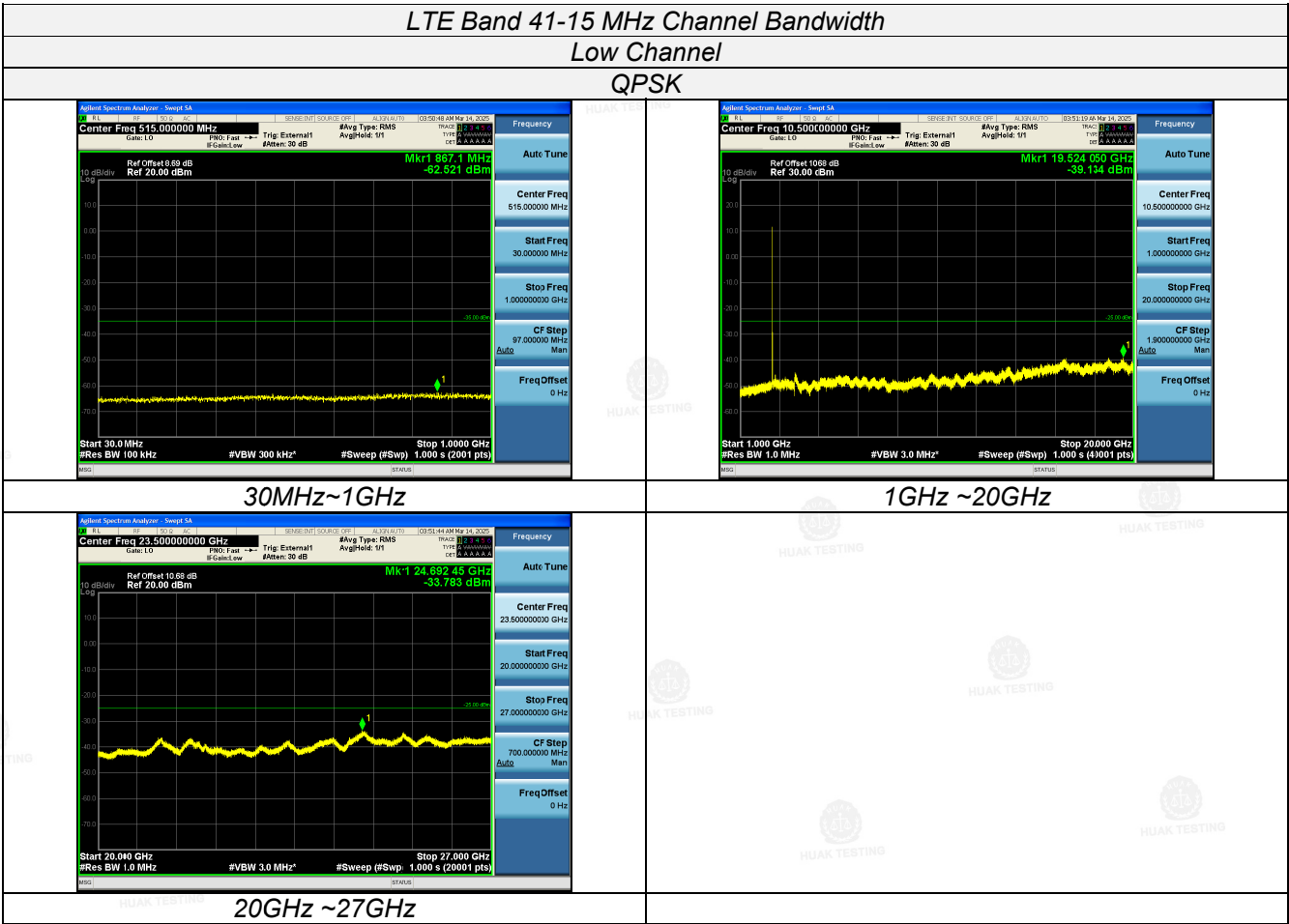




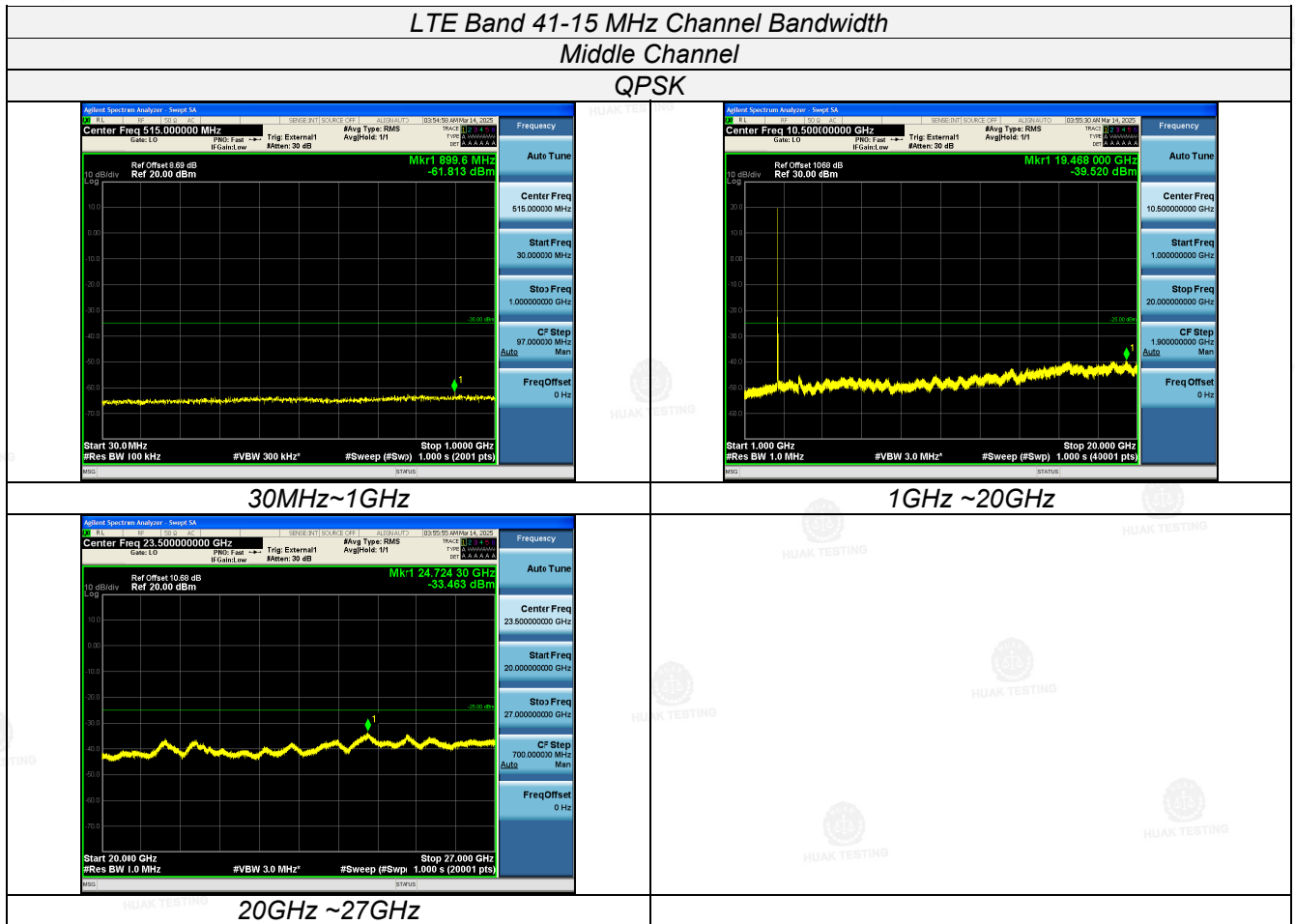


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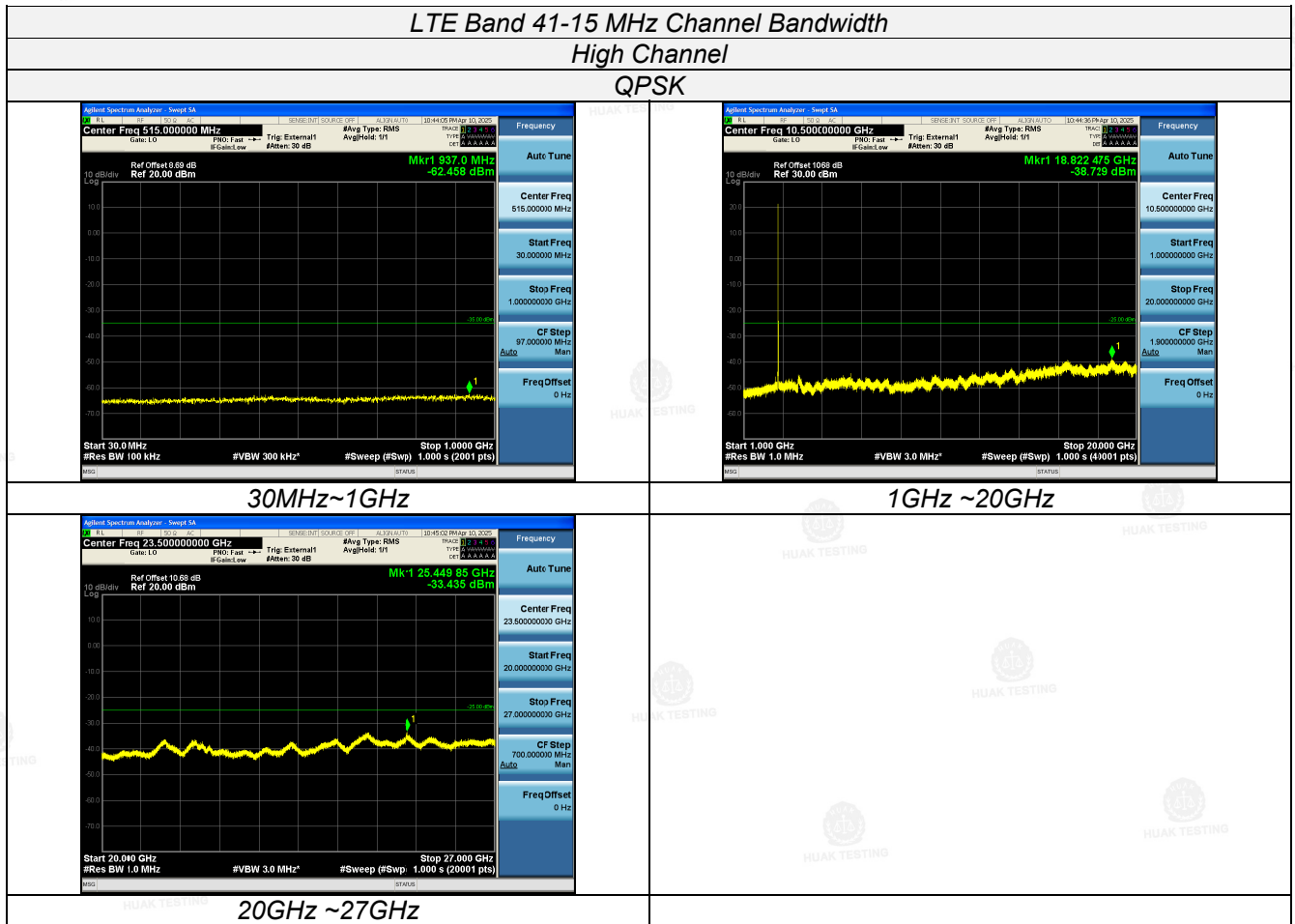


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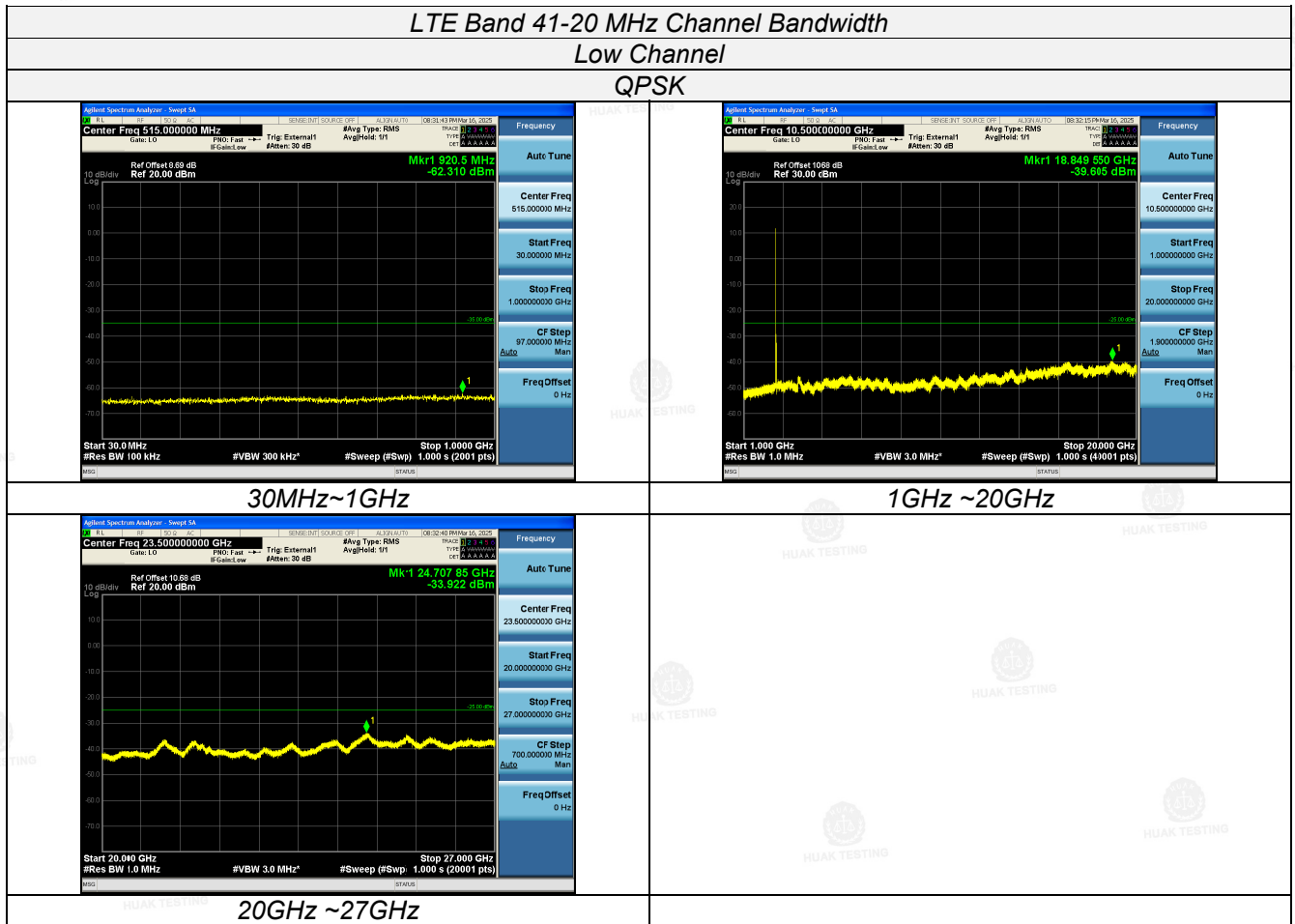
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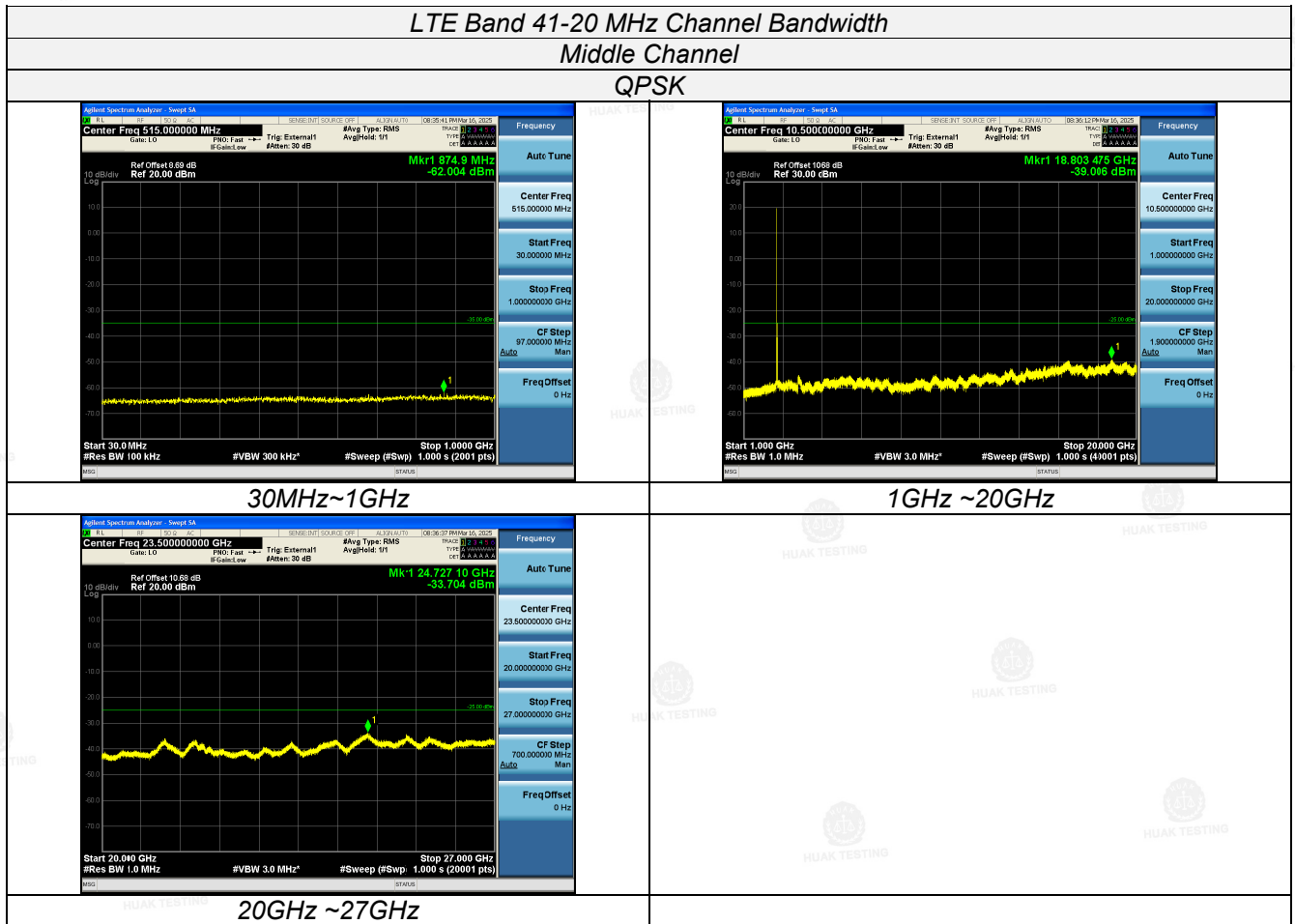
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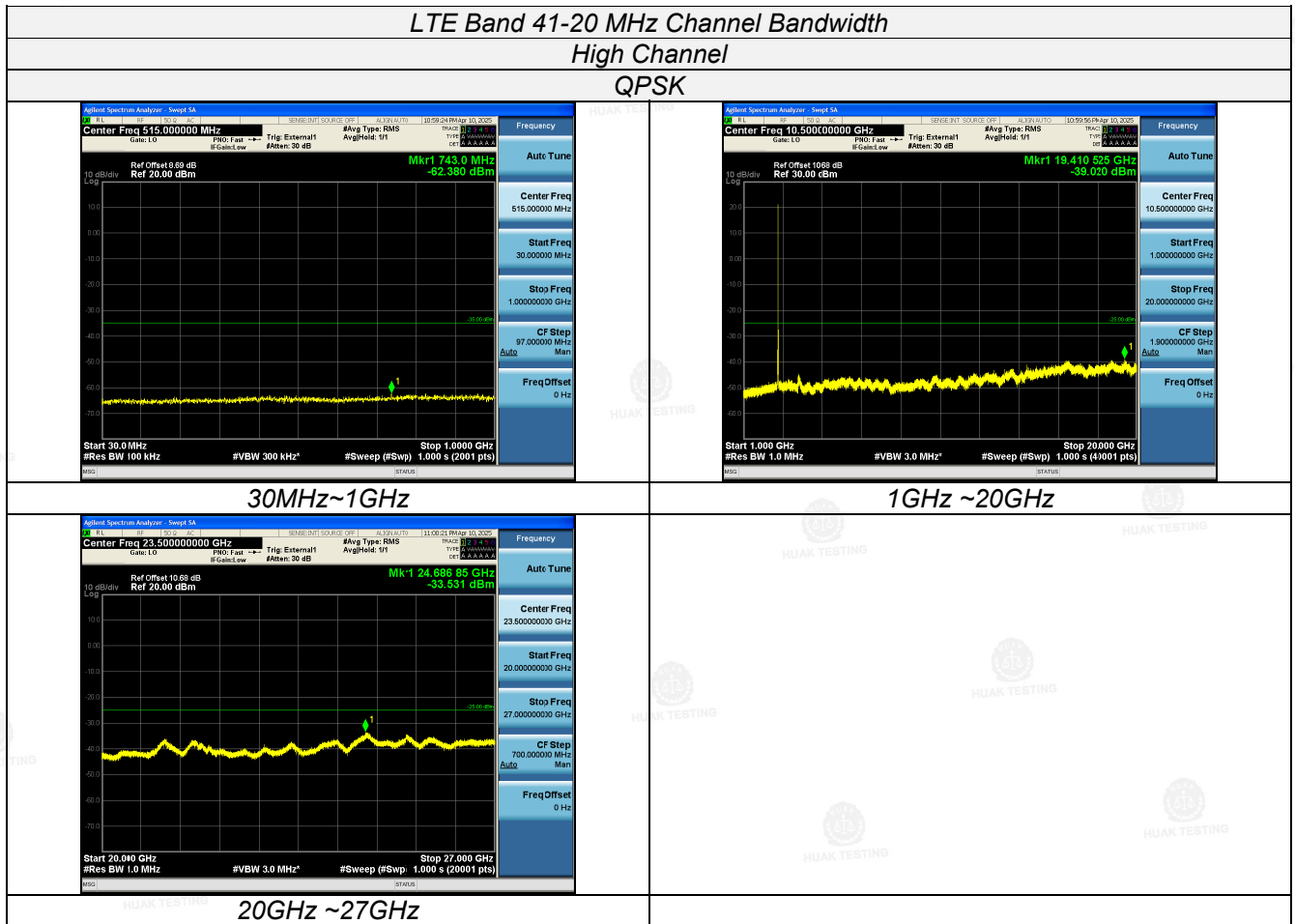
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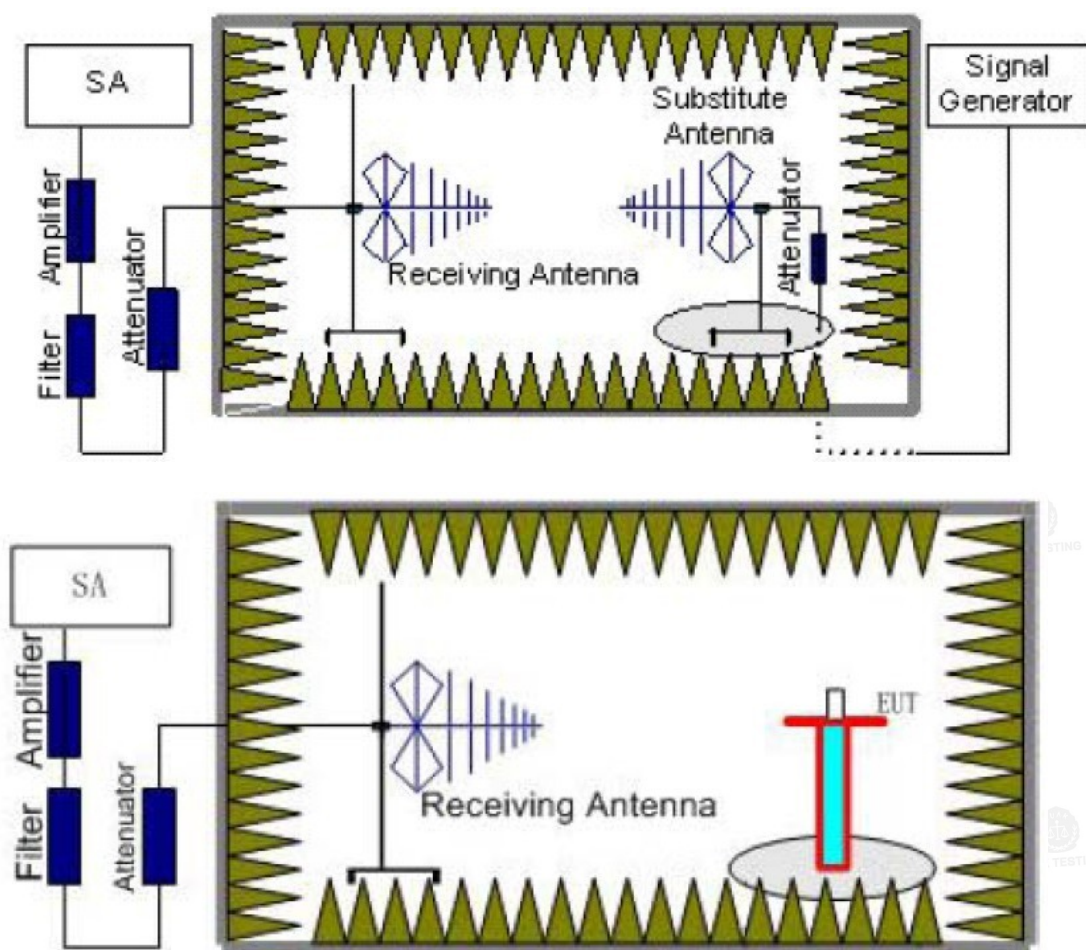
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## 4.6 Radiated Spurious Emission

### TEST APPLICABLE

The power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitting power (P) by a factor of at least  $40 + 10 \log P$  dB (–10 dBm, 100 nW) on all frequencies between the channel edge and 5 MHz from the channel edge,  $43 + 10 \log P$  dB (–13 dBm, 50 nW) on all frequencies between 5 MHz and X MHz from the channel edge, and  $55 + 10 \log P$  dB (–25 dBm, 3 nW) on all frequencies more than 20 MHz from the channel edge, where X MHz is the greater of 6 MHz or the actual emission bandwidth (26 dB).

### TEST CONFIGURATION



### TEST PROCEDURE

The EUT was setup according to EIA/TIA 603D

- The EUT shall be placed at the specified height on a support, and in the position closest to normal use as declared by provider.
- The test antenna shall be oriented initially for vertical polarization and shall be chosen to correspond to the frequency of the transmitter
- The output of the test antenna shall be connected to the measuring receiver.
- The transmitter shall be switched on and the measuring receiver shall be tuned to the frequency of the transmitter under test.

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- e. The test antenna shall be raised and lowered through the specified range of height until a maximum signal level is detected by the measuring receiver.
- f. The transmitter shall then be rotated through 360° in the horizontal plane, until the maximum signal level is detected by the measuring receiver.
- g. The test antenna shall be raised and lowered again through the specified range of height until a maximum signal level is detected by the measuring receiver.
- h. The maximum signal level detected by the measuring receiver shall be noted.
- i. The transmitter shall be replaced by a substitution antenna.
- j. The substitution antenna shall be orientated for vertical polarization and the length of the substitution antenna shall be adjusted to correspond to the frequency of the transmitter.
- k. The substitution antenna shall be connected to a calibrated signal generator.
- l. If necessary, the input attenuator setting of the measuring receiver shall be adjusted in order to increase the sensitivity of the measuring receiver.
- m. The test antenna shall be raised and lowered through the specified range of height to ensure that the maximum signal is received.
- n. The input signal to the substitution antenna shall be adjusted to the level that produces a level detected by the measuring receiver, that is equal to the level noted while the transmitter radiated power was measured, corrected for the change of input attenuator setting of the measuring receiver.
- o. The measurement shall be repeated with the test antenna and the substitution antenna orientated for horizontal polarization.
- p. The measure of the effective radiated power is the larger of the two levels recorded at the input to the substitution antenna, corrected for gain of the substitution antenna if necessary.
- q. Test site anechoic chamber refer to ANSI C63.4:2014.

| Frequency   | Channel | Frequency Range | Verdict |
|-------------|---------|-----------------|---------|
| LTE Band 41 | Low     | 30MHz -26.5GHz  | PASS    |
|             | Middle  | 30MHz -26.5GHz  | PASS    |
|             | High    | 30MHz -26.5GHz  | PASS    |

#### Radiated Measurement:

##### Remark:

1. We measured all RB Configuration refer 3GPP TS136 521 for each Channel Bandwidth of LTE Band 41; recorded worst case for each Channel Bandwidth of LTE Band 41.
2.  $EIRP = P_S(dBm) - P_{cl}(dB) + G_a(dBi)$
3. Not recorded other points means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
4.  $Margin = Limit - EIRP$

Test Model No.: S25 Ultra

#### LTE Band 41 Channel Bandwidth 5MHz\_QPSK\_1RB#0\_Low Channel

| Frequency (MHz) | $P_S$ (dBm) | $P_{cl}$ (dB) | Distance | $G_a$ Antenna Gain(dB) | Peak EIRP (dBm) | Limit (dBm) | Margin (dB) | Polarization |
|-----------------|-------------|---------------|----------|------------------------|-----------------|-------------|-------------|--------------|
| 5075.0          | -46.04      | 4.39          | 3.00     | 12.34                  | -38.09          | -25.00      | 25.43       | H            |
| 7612.5          | -51         | 5.31          | 3.00     | 13.52                  | -42.79          | -25.00      | 31.31       | H            |
| 5075.0          | -45.21      | 4.39          | 3.00     | 12.34                  | -37.26          | -25.00      | 24.60       | V            |
| 7612.5          | -54.37      | 5.31          | 3.00     | 13.52                  | -46.16          | -25.00      | 34.68       | V            |

#### LTE Band 41 Channel Bandwidth 5MHz\_QPSK\_1RB#0\_Middle Channel

| Frequency (MHz) | $P_S$ (dBm) | $P_{cl}$ (dB) | Distance | $G_a$ Antenna Gain(dB) | Peak EIRP (dBm) | Limit (dBm) | Margin (dB) | Polarization |
|-----------------|-------------|---------------|----------|------------------------|-----------------|-------------|-------------|--------------|
| 5180.0          | -48.7       | 4.41          | 3.00     | 12.34                  | -40.77          | -25.00      | 15.77       | H            |
| 7770.0          | -48.9       | 5.38          | 3.00     | 13.58                  | -40.7           | -25.00      | 15.7        | H            |
| 5180.0          | -47.36      | 4.41          | 3.00     | 12.34                  | -39.43          | -25.00      | 14.43       | V            |
| 7770.0          | -44.73      | 5.38          | 3.00     | 13.58                  | -36.53          | -25.00      | 11.53       | V            |

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### LTE Band 41\_Channel Bandwidth 5MHz\_QPSK\_1RB#0\_High Channel

| Frequency (MHz) | Ps (dBm) | P <sub>cl</sub> (dB) | Diatance | G <sub>a</sub> Antenna Gain(dB) | Peak EIRP (dBm) | Limit (dBm) | Margin (dB) | Polarization |
|-----------------|----------|----------------------|----------|---------------------------------|-----------------|-------------|-------------|--------------|
| 5305.0          | -43.99   | 4.45                 | 3.00     | 12.45                           | -35.99          | -25.00      | 10.99       | H            |
| 7957.5          | -51.7    | 5.47                 | 3.00     | 13.66                           | -43.51          | -25.00      | 18.51       | H            |
| 5305.0          | -43.98   | 4.45                 | 3.00     | 12.45                           | -35.98          | -25.00      | 10.98       | V            |
| 7957.5          | -51.67   | 5.48                 | 3.00     | 13.66                           | -43.49          | -25.00      | 18.49       | V            |

### LTE Band 41\_Channel Bandwidth 10MHz\_QPSK\_1RB#0\_Low Channel

| Frequency (MHz) | Ps (dBm) | P <sub>cl</sub> (dB) | Diatance | G <sub>a</sub> Antenna Gain(dB) | Peak EIRP (dBm) | Limit (dBm) | Margin (dB) | Polarization |
|-----------------|----------|----------------------|----------|---------------------------------|-----------------|-------------|-------------|--------------|
| 5080.0          | -44.78   | 4.39                 | 3.00     | 12.34                           | -36.83          | -25.00      | 24.17       | H            |
| 7620.0          | -48.79   | 5.31                 | 3.00     | 13.52                           | -40.58          | -25.00      | 29.10       | H            |
| 5080.0          | -42.98   | 4.39                 | 3.00     | 12.34                           | -35.03          | -25.00      | 22.37       | V            |
| 7620.0          | -52.47   | 5.31                 | 3.00     | 13.52                           | -44.26          | -25.00      | 32.78       | V            |

### LTE Band 41\_Channel Bandwidth 10MHz\_QPSK\_1RB#0\_Middle Channel

| Frequency (MHz) | Ps (dBm) | P <sub>cl</sub> (dB) | Diatance | G <sub>a</sub> Antenna Gain(dB) | Peak EIRP (dBm) | Limit (dBm) | Margin (dB) | Polarization |
|-----------------|----------|----------------------|----------|---------------------------------|-----------------|-------------|-------------|--------------|
| 5180.0          | -46.87   | 4.41                 | 3.00     | 12.34                           | -38.94          | -25.00      | 13.94       | H            |
| 7770.0          | -48.55   | 5.38                 | 3.00     | 13.58                           | -40.35          | -25.00      | 15.35       | H            |
| 5180.0          | -45.09   | 4.41                 | 3.00     | 12.34                           | -37.16          | -25.00      | 12.16       | V            |
| 7770.0          | -46.51   | 5.38                 | 3.00     | 13.58                           | -38.31          | -25.00      | 13.31       | V            |

### LTE Band 41\_Channel Bandwidth 10MHz\_QPSK\_1RB#0\_High Channel

| Frequency (MHz) | Ps (dBm) | P <sub>cl</sub> (dB) | Diatance | G <sub>a</sub> Antenna Gain(dB) | Peak EIRP (dBm) | Limit (dBm) | Margin (dB) | Polarization |
|-----------------|----------|----------------------|----------|---------------------------------|-----------------|-------------|-------------|--------------|
| 5300.0          | -42.99   | 4.45                 | 3.00     | 12.45                           | -34.99          | -25.00      | 9.99        | H            |
| 7950.0          | -51.97   | 5.47                 | 3.00     | 13.66                           | -43.78          | -25.00      | 18.78       | H            |
| 5300.0          | -44.53   | 4.45                 | 3.00     | 12.45                           | -36.53          | -25.00      | 11.53       | V            |
| 7950.0          | -50.71   | 5.48                 | 3.00     | 13.66                           | -42.53          | -25.00      | 17.53       | V            |

### LTE Band 41\_Channel Bandwidth 15MHz\_QPSK\_1RB#0\_Low Channel

| Frequency (MHz) | Ps (dBm) | P <sub>cl</sub> (dB) | Diatance | G <sub>a</sub> Antenna Gain(dB) | Peak EIRP (dBm) | Limit (dBm) | Margin (dB) | Polarization |
|-----------------|----------|----------------------|----------|---------------------------------|-----------------|-------------|-------------|--------------|
| 5085.0          | -46.88   | 4.39                 | 3.00     | 12.34                           | -38.93          | -25.00      | 26.27       | H            |
| 7627.5          | -51.31   | 5.31                 | 3.00     | 13.52                           | -43.1           | -25.00      | 31.62       | H            |
| 5085.0          | -45.29   | 4.39                 | 3.00     | 12.34                           | -37.34          | -25.00      | 24.68       | V            |
| 7627.5          | -52.87   | 5.31                 | 3.00     | 13.52                           | -44.66          | -25.00      | 33.18       | V            |

### LTE Band 41\_Channel Bandwidth 15MHz\_QPSK\_1RB#0\_Middle Channel

| Frequency (MHz) | Ps (dBm) | P <sub>cl</sub> (dB) | Diatance | G <sub>a</sub> Antenna Gain(dB) | Peak EIRP (dBm) | Limit (dBm) | Margin (dB) | Polarization |
|-----------------|----------|----------------------|----------|---------------------------------|-----------------|-------------|-------------|--------------|
| 5180.0          | -47.21   | 4.41                 | 3.00     | 12.34                           | -39.28          | -25.00      | 14.28       | H            |
| 7770.0          | -50.95   | 5.38                 | 3.00     | 13.58                           | -42.75          | -25.00      | 17.75       | H            |
| 5180.0          | -47.09   | 4.41                 | 3.00     | 12.34                           | -39.16          | -25.00      | 14.16       | V            |
| 7770.0          | -44.76   | 5.38                 | 3.00     | 13.58                           | -36.56          | -25.00      | 11.56       | V            |

*LTE Band 41 Channel Bandwidth 15MHz\_QPSK\_1RB#0\_High Channel*

| Frequency (MHz) | Ps (dBm) | P <sub>cl</sub> (dB) | Diatance | G <sub>a</sub> Antenna Gain(dB) | Peak EIRP (dBm) | Limit (dBm) | Margin (dB) | Polarization |
|-----------------|----------|----------------------|----------|---------------------------------|-----------------|-------------|-------------|--------------|
| 5295.0          | -43.82   | 4.45                 | 3.00     | 12.45                           | -35.82          | -25.00      | 10.82       | H            |
| 7942.5          | -51.54   | 5.47                 | 3.00     | 13.66                           | -43.35          | -25.00      | 18.35       | H            |
| 5295.0          | -44.98   | 4.45                 | 3.00     | 12.45                           | -36.98          | -25.00      | 11.98       | V            |
| 7942.5          | -51.98   | 5.48                 | 3.00     | 13.66                           | -43.8           | -25.00      | 18.8        | V            |

*LTE Band 41 Channel Bandwidth 20MHz\_QPSK\_1RB#0\_Low Channel*

| Frequency (MHz) | Ps (dBm) | P <sub>cl</sub> (dB) | Diatance | G <sub>a</sub> Antenna Gain(dB) | Peak EIRP (dBm) | Limit (dBm) | Margin (dB) | Polarization |
|-----------------|----------|----------------------|----------|---------------------------------|-----------------|-------------|-------------|--------------|
| 5090.0          | -47.3    | 4.39                 | 3.00     | 12.34                           | -39.35          | -25.00      | 26.69       | H            |
| 7635.0          | -49.21   | 5.31                 | 3.00     | 13.52                           | -41             | -25.00      | 29.52       | H            |
| 5090.0          | -44.45   | 4.39                 | 3.00     | 12.34                           | -36.5           | -25.00      | 23.84       | V            |
| 7635.0          | -52.02   | 5.31                 | 3.00     | 13.52                           | -43.81          | -25.00      | 32.33       | V            |

*LTE Band 41 Channel Bandwidth 20MHz\_QPSK\_1RB#0\_Middle Channel*

| Frequency (MHz) | Ps (dBm) | P <sub>cl</sub> (dB) | Diatance | G <sub>a</sub> Antenna Gain(dB) | Peak EIRP (dBm) | Limit (dBm) | Margin (dB) | Polarization |
|-----------------|----------|----------------------|----------|---------------------------------|-----------------|-------------|-------------|--------------|
| 5180.0          | -48.08   | 4.41                 | 3.00     | 12.34                           | -40.15          | -25.00      | 15.15       | H            |
| 7770.0          | -50.72   | 5.38                 | 3.00     | 13.58                           | -42.52          | -25.00      | 17.52       | H            |
| 5180.0          | -46.95   | 4.41                 | 3.00     | 12.34                           | -39.02          | -25.00      | 14.02       | V            |
| 7770.0          | -44.02   | 5.38                 | 3.00     | 13.58                           | -35.82          | -25.00      | 10.82       | V            |

*LTE Band 41 Channel Bandwidth 20MHz\_QPSK\_1RB#0\_High Channel*

| Frequency (MHz) | Ps (dBm) | P <sub>cl</sub> (dB) | Diatance | G <sub>a</sub> Antenna Gain(dB) | Peak EIRP (dBm) | Limit (dBm) | Margin (dB) | Polarization |
|-----------------|----------|----------------------|----------|---------------------------------|-----------------|-------------|-------------|--------------|
| 5290.0          | -41.81   | 4.45                 | 3.00     | 12.45                           | -33.81          | -25.00      | 8.81        | H            |
| 7935.0          | -51.88   | 5.47                 | 3.00     | 13.66                           | -43.69          | -25.00      | 18.69       | H            |
| 5290.0          | -43.76   | 4.45                 | 3.00     | 12.45                           | -35.76          | -25.00      | 10.76       | V            |
| 7935.0          | -51.49   | 5.48                 | 3.00     | 13.66                           | -43.31          | -25.00      | 18.31       | V            |

*LTE Band 41 Channel Bandwidth 5MHz\_16QAM\_1RB#0\_Low Channel*

| Frequency (MHz) | Ps (dBm) | P <sub>cl</sub> (dB) | Diatance | G <sub>a</sub> Antenna Gain(dB) | Peak EIRP (dBm) | Limit (dBm) | Margin (dB) | Polarization |
|-----------------|----------|----------------------|----------|---------------------------------|-----------------|-------------|-------------|--------------|
| 5075.0          | -45.72   | 4.39                 | 3.00     | 12.34                           | -37.77          | -25.00      | 25.11       | H            |
| 7612.5          | -49.39   | 5.31                 | 3.00     | 13.52                           | -41.18          | -25.00      | 29.70       | H            |
| 5075.0          | -42.9    | 4.39                 | 3.00     | 12.34                           | -34.95          | -25.00      | 22.29       | V            |
| 7612.5          | -52.16   | 5.31                 | 3.00     | 13.52                           | -43.95          | -25.00      | 32.47       | V            |

*LTE Band 41 Channel Bandwidth 5MHz\_16QAM\_1RB#0\_Middle Channel*

| Frequency (MHz) | Ps (dBm) | P <sub>cl</sub> (dB) | Diatance | G <sub>a</sub> Antenna Gain(dB) | Peak EIRP (dBm) | Limit (dBm) | Margin (dB) | Polarization |
|-----------------|----------|----------------------|----------|---------------------------------|-----------------|-------------|-------------|--------------|
| 5180.0          | -49.07   | 4.41                 | 3.00     | 12.34                           | -41.14          | -25.00      | 16.14       | H            |
| 7770.0          | -48.73   | 5.38                 | 3.00     | 13.58                           | -40.53          | -25.00      | 15.53       | H            |
| 5180.0          | -46.08   | 4.41                 | 3.00     | 12.34                           | -38.15          | -25.00      | 13.15       | V            |
| 7770.0          | -43.96   | 5.38                 | 3.00     | 13.58                           | -35.76          | -25.00      | 10.76       | V            |

**LTE Band 41 Channel Bandwidth 5MHz 16QAM 1RB#0 High Channel**

| Frequency (MHz) | Ps (dBm) | P <sub>cl</sub> (dB) | Diatance | G <sub>a</sub> Antenna Gain(dB) | Peak EIRP (dBm) | Limit (dBm) | Margin (dB) | Polarization |
|-----------------|----------|----------------------|----------|---------------------------------|-----------------|-------------|-------------|--------------|
| 5305.0          | -43.59   | 4.45                 | 3.00     | 12.45                           | -35.59          | -25.00      | 10.59       | H            |
| 7957.5          | -51.47   | 5.47                 | 3.00     | 13.66                           | -43.28          | -25.00      | 18.28       | H            |
| 5305.0          | -44.68   | 4.45                 | 3.00     | 12.45                           | -36.68          | -25.00      | 11.68       | V            |
| 7957.5          | -52.54   | 5.48                 | 3.00     | 13.66                           | -44.36          | -25.00      | 19.36       | V            |

**LTE Band 41 Channel Bandwidth 10MHz 16QAM 1RB#0 Low Channel**

| Frequency (MHz) | Ps (dBm) | P <sub>cl</sub> (dB) | Diatance | G <sub>a</sub> Antenna Gain(dB) | Peak EIRP (dBm) | Limit (dBm) | Margin (dB) | Polarization |
|-----------------|----------|----------------------|----------|---------------------------------|-----------------|-------------|-------------|--------------|
| 5080.0          | -44.82   | 4.39                 | 3.00     | 12.34                           | -36.87          | -25.00      | 24.21       | H            |
| 7620.0          | -49.19   | 5.31                 | 3.00     | 13.52                           | -40.98          | -25.00      | 29.50       | H            |
| 5080.0          | -43.11   | 4.39                 | 3.00     | 12.34                           | -35.16          | -25.00      | 22.50       | V            |
| 7620.0          | -51.88   | 5.31                 | 3.00     | 13.52                           | -43.67          | -25.00      | 32.19       | V            |

**LTE Band 41 Channel Bandwidth 10MHz 16QAM 1RB#0 Middle Channel**

| Frequency (MHz) | Ps (dBm) | P <sub>cl</sub> (dB) | Diatance | G <sub>a</sub> Antenna Gain(dB) | Peak EIRP (dBm) | Limit (dBm) | Margin (dB) | Polarization |
|-----------------|----------|----------------------|----------|---------------------------------|-----------------|-------------|-------------|--------------|
| 5180.0          | -48.67   | 4.41                 | 3.00     | 12.34                           | -40.74          | -25.00      | 15.74       | H            |
| 7770.0          | -49.93   | 5.38                 | 3.00     | 13.58                           | -41.73          | -25.00      | 16.73       | H            |
| 5180.0          | -46.52   | 4.41                 | 3.00     | 12.34                           | -38.59          | -25.00      | 13.59       | V            |
| 7770.0          | -46.78   | 5.38                 | 3.00     | 13.58                           | -38.58          | -25.00      | 13.58       | V            |

**LTE Band 41 Channel Bandwidth 10MHz 16QAM 1RB#0 High Channel**

| Frequency (MHz) | Ps (dBm) | P <sub>cl</sub> (dB) | Diatance | G <sub>a</sub> Antenna Gain(dB) | Peak EIRP (dBm) | Limit (dBm) | Margin (dB) | Polarization |
|-----------------|----------|----------------------|----------|---------------------------------|-----------------|-------------|-------------|--------------|
| 5300.0          | -43.17   | 4.45                 | 3.00     | 12.45                           | -35.17          | -25.00      | 10.17       | H            |
| 7950.0          | -51.59   | 5.47                 | 3.00     | 13.66                           | -43.4           | -25.00      | 18.4        | H            |
| 5300.0          | -44.57   | 4.45                 | 3.00     | 12.45                           | -36.57          | -25.00      | 11.57       | V            |
| 7950.0          | -51.29   | 5.48                 | 3.00     | 13.66                           | -43.11          | -25.00      | 18.11       | V            |

**LTE Band 41 Channel Bandwidth 15MHz 16QAM 1RB#0 Low Channel**

| Frequency (MHz) | Ps (dBm) | P <sub>cl</sub> (dB) | Diatance | G <sub>a</sub> Antenna Gain(dB) | Peak EIRP (dBm) | Limit (dBm) | Margin (dB) | Polarization |
|-----------------|----------|----------------------|----------|---------------------------------|-----------------|-------------|-------------|--------------|
| 5085.0          | -43.19   | 4.39                 | 3.00     | 12.34                           | -35.24          | -25.00      | 22.58       | H            |
| 7627.5          | -52.09   | 5.31                 | 3.00     | 13.52                           | -43.88          | -25.00      | 32.40       | H            |
| 5085.0          | -44.39   | 4.39                 | 3.00     | 12.34                           | -36.44          | -25.00      | 23.78       | V            |
| 7627.5          | -51.13   | 5.31                 | 3.00     | 13.52                           | -42.92          | -25.00      | 31.44       | V            |

**LTE Band 41 Channel Bandwidth 15MHz 16QAM 1RB#0 Middle Channel**

| Frequency (MHz) | Ps (dBm) | P <sub>cl</sub> (dB) | Diatance | G <sub>a</sub> Antenna Gain(dB) | Peak EIRP (dBm) | Limit (dBm) | Margin (dB) | Polarization |
|-----------------|----------|----------------------|----------|---------------------------------|-----------------|-------------|-------------|--------------|
| 5180.0          | -41.7    | 4.41                 | 3.00     | 12.34                           | -33.77          | -25.00      | 8.77        | H            |
| 7770.0          | -54.04   | 5.38                 | 3.00     | 13.58                           | -45.84          | -25.00      | 20.84       | H            |
| 5180.0          | -44.61   | 4.41                 | 3.00     | 12.34                           | -36.68          | -25.00      | 11.68       | V            |
| 7770.0          | -51.68   | 5.38                 | 3.00     | 13.58                           | -43.48          | -25.00      | 18.48       | V            |

**LTE Band 41 Channel Bandwidth 15MHz 16QAM 1RB#0 High Channel**

| Frequency (MHz) | Ps (dBm) | P <sub>cl</sub> (dB) | Diatance | G <sub>a</sub> Antenna Gain(dB) | Peak EIRP (dBm) | Limit (dBm) | Margin (dB) | Polarization |
|-----------------|----------|----------------------|----------|---------------------------------|-----------------|-------------|-------------|--------------|
| 5295.0          | -41.16   | 4.45                 | 3.00     | 12.45                           | -33.16          | -25.00      | 8.16        | H            |
| 7942.5          | -54.11   | 5.47                 | 3.00     | 13.66                           | -45.92          | -25.00      | 20.92       | H            |
| 5295.0          | -43.15   | 4.45                 | 3.00     | 12.45                           | -35.15          | -25.00      | 10.15       | V            |
| 7942.5          | -53.61   | 5.48                 | 3.00     | 13.66                           | -45.43          | -25.00      | 20.43       | V            |

**LTE Band 41 Channel Bandwidth 20MHz 16QAM 1RB#0 Low Channel**

| Frequency (MHz) | Ps (dBm) | P <sub>cl</sub> (dB) | Diatance | G <sub>a</sub> Antenna Gain(dB) | Peak EIRP (dBm) | Limit (dBm) | Margin (dB) | Polarization |
|-----------------|----------|----------------------|----------|---------------------------------|-----------------|-------------|-------------|--------------|
| 5090.0          | -40.99   | 4.39                 | 3.00     | 12.34                           | -33.04          | -25.00      | 20.38       | H            |
| 7635.0          | -51.72   | 5.31                 | 3.00     | 13.52                           | -43.51          | -25.00      | 32.03       | H            |
| 5090.0          | -42.98   | 4.39                 | 3.00     | 12.34                           | -35.03          | -25.00      | 22.37       | V            |
| 7635.0          | -52.09   | 5.31                 | 3.00     | 13.52                           | -43.88          | -25.00      | 32.40       | V            |

**LTE Band 41 Channel Bandwidth 20MHz 16QAM 1RB#0 Middle Channel**

| Frequency (MHz) | Ps (dBm) | P <sub>cl</sub> (dB) | Diatance | G <sub>a</sub> Antenna Gain(dB) | Peak EIRP (dBm) | Limit (dBm) | Margin (dB) | Polarization |
|-----------------|----------|----------------------|----------|---------------------------------|-----------------|-------------|-------------|--------------|
| 5180.0          | -41.96   | 4.41                 | 3.00     | 12.34                           | -34.03          | -25.00      | 9.03        | H            |
| 7770.0          | -53.1    | 5.38                 | 3.00     | 13.58                           | -44.9           | -25.00      | 19.9        | H            |
| 5180.0          | -45.29   | 4.41                 | 3.00     | 12.34                           | -37.36          | -25.00      | 12.36       | V            |
| 7770.0          | -51.47   | 5.38                 | 3.00     | 13.58                           | -43.27          | -25.00      | 18.27       | V            |

**LTE Band 41 Channel Bandwidth 20MHz 16QAM 1RB#0 High Channel**

| Frequency (MHz) | Ps (dBm) | P <sub>cl</sub> (dB) | Diatance | G <sub>a</sub> Antenna Gain(dB) | Peak EIRP (dBm) | Limit (dBm) | Margin (dB) | Polarization |
|-----------------|----------|----------------------|----------|---------------------------------|-----------------|-------------|-------------|--------------|
| 5290.0          | -41.34   | 4.45                 | 3.00     | 12.45                           | -33.34          | -25.00      | 8.34        | H            |
| 7935.0          | -54.49   | 5.47                 | 3.00     | 13.66                           | -46.3           | -25.00      | 21.3        | H            |
| 5290.0          | -43.44   | 4.45                 | 3.00     | 12.45                           | -35.44          | -25.00      | 10.44       | V            |
| 7935.0          | -52.75   | 5.48                 | 3.00     | 13.66                           | -44.57          | -25.00      | 19.57       | V            |

All modes of operation were investigated and the worst-case emissions are reported.  
Series Model No.: R12 pro

#### LTE Band 41\_Channel Bandwidth 5MHz\_QPSK\_1RB#0

| Frequency (MHz) | Ps (dBm) | P <sub>cl</sub> (dB) | Diatance | G <sub>a</sub> Antenna Gain(dB) | Peak EIRP (dBm) | Limit (dBm) | Margin (dB) | Polarization |
|-----------------|----------|----------------------|----------|---------------------------------|-----------------|-------------|-------------|--------------|
| 5305.0          | -43.1    | 4.45                 | 3.00     | 12.45                           | -35.1           | -25.00      | 10.1        | H            |
| 7957.5          | -53.54   | 5.47                 | 3.00     | 13.66                           | -45.35          | -25.00      | 20.35       | H            |
| 5305.0          | -44.94   | 4.45                 | 3.00     | 12.45                           | -36.94          | -25.00      | 11.94       | V            |
| 7957.5          | -52.85   | 5.48                 | 3.00     | 13.66                           | -44.67          | -25.00      | 19.67       | V            |

#### LTE Band 41\_Channel Bandwidth 10MHz\_QPSK\_1RB#0

| Frequency (MHz) | Ps (dBm) | P <sub>cl</sub> (dB) | Diatance | G <sub>a</sub> Antenna Gain(dB) | Peak EIRP (dBm) | Limit (dBm) | Margin (dB) | Polarization |
|-----------------|----------|----------------------|----------|---------------------------------|-----------------|-------------|-------------|--------------|
| 5300.0          | -42.45   | 4.45                 | 3.00     | 12.45                           | -34.45          | -25.00      | 9.45        | H            |
| 7950.0          | -53.31   | 5.47                 | 3.00     | 13.66                           | -45.12          | -25.00      | 20.12       | H            |
| 5300.0          | -45.29   | 4.45                 | 3.00     | 12.45                           | -37.29          | -25.00      | 12.29       | V            |
| 7950.0          | -51.89   | 5.48                 | 3.00     | 13.66                           | -43.71          | -25.00      | 18.71       | V            |

#### LTE Band 41\_Channel Bandwidth 15MHz\_QPSK\_1RB#0

| Frequency (MHz) | Ps (dBm) | P <sub>cl</sub> (dB) | Diatance | G <sub>a</sub> Antenna Gain(dB) | Peak EIRP (dBm) | Limit (dBm) | Margin (dB) | Polarization |
|-----------------|----------|----------------------|----------|---------------------------------|-----------------|-------------|-------------|--------------|
| 5295.0          | -42.9    | 4.45                 | 3.00     | 12.45                           | -34.9           | -25.00      | 9.9         | H            |
| 7942.5          | -52.13   | 5.47                 | 3.00     | 13.66                           | -43.94          | -25.00      | 18.94       | H            |
| 5295.0          | -45.02   | 4.45                 | 3.00     | 12.45                           | -37.02          | -25.00      | 12.02       | V            |
| 7942.5          | -53.1    | 5.48                 | 3.00     | 13.66                           | -44.92          | -25.00      | 19.92       | V            |

#### LTE Band 41\_Channel Bandwidth 20MHz\_QPSK\_1RB#0

| Frequency (MHz) | Ps (dBm) | P <sub>cl</sub> (dB) | Diatance | G <sub>a</sub> Antenna Gain(dB) | Peak EIRP (dBm) | Limit (dBm) | Margin (dB) | Polarization |
|-----------------|----------|----------------------|----------|---------------------------------|-----------------|-------------|-------------|--------------|
| 5290.0          | -43.59   | 4.45                 | 3.00     | 12.45                           | -35.59          | -25.00      | 10.59       | H            |
| 7935.0          | -52.87   | 5.47                 | 3.00     | 13.66                           | -44.68          | -25.00      | 19.68       | H            |
| 5290.0          | -43.01   | 4.45                 | 3.00     | 12.45                           | -35.01          | -25.00      | 10.01       | V            |
| 7935.0          | -52.12   | 5.48                 | 3.00     | 13.66                           | -43.94          | -25.00      | 18.94       | V            |

#### LTE Band 41\_Channel Bandwidth 5MHz\_16QAM\_1RB#0

| Frequency (MHz) | Ps (dBm) | P <sub>cl</sub> (dB) | Diatance | G <sub>a</sub> Antenna Gain(dB) | Peak EIRP (dBm) | Limit (dBm) | Margin (dB) | Polarization |
|-----------------|----------|----------------------|----------|---------------------------------|-----------------|-------------|-------------|--------------|
| 5305.0          | -43.53   | 4.45                 | 3.00     | 12.45                           | -35.53          | -25.00      | 10.53       | H            |
| 7957.5          | -53.38   | 5.47                 | 3.00     | 13.66                           | -45.19          | -25.00      | 20.19       | H            |
| 5305.0          | -44.51   | 4.45                 | 3.00     | 12.45                           | -36.51          | -25.00      | 11.51       | V            |
| 7957.5          | -52.45   | 5.48                 | 3.00     | 13.66                           | -44.27          | -25.00      | 19.27       | V            |

#### LTE Band 41\_Channel Bandwidth 10MHz\_16QAM\_1RB#0

| Frequency (MHz) | Ps (dBm) | P <sub>cl</sub> (dB) | Diatance | G <sub>a</sub> Antenna Gain(dB) | Peak EIRP (dBm) | Limit (dBm) | Margin (dB) | Polarization |
|-----------------|----------|----------------------|----------|---------------------------------|-----------------|-------------|-------------|--------------|
| 5300.0          | -43.31   | 4.45                 | 3.00     | 12.45                           | -35.31          | -25.00      | 10.31       | H            |
| 7950.0          | -53.12   | 5.47                 | 3.00     | 13.66                           | -44.93          | -25.00      | 19.93       | H            |
| 5300.0          | -43.91   | 4.45                 | 3.00     | 12.45                           | -35.91          | -25.00      | 10.91       | V            |
| 7950.0          | -52.21   | 5.48                 | 3.00     | 13.66                           | -44.03          | -25.00      | 19.03       | V            |

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**LTE Band 41\_Channel Bandwidth 15MHz\_16QAM\_1RB#0**

| Frequency (MHz) | Ps (dBm) | P <sub>cl</sub> (dB) | Diatance | G <sub>a</sub> Antenna Gain(dB) | Peak EIRP (dBm) | Limit (dBm) | Margin (dB) | Polarization |
|-----------------|----------|----------------------|----------|---------------------------------|-----------------|-------------|-------------|--------------|
| 5295.0          | -42.32   | 4.45                 | 3.00     | 12.45                           | -34.32          | -25.00      | 9.32        | H            |
| 7942.5          | -53.74   | 5.47                 | 3.00     | 13.66                           | -45.55          | -25.00      | 20.55       | H            |
| 5295.0          | -42.42   | 4.45                 | 3.00     | 12.45                           | -34.42          | -25.00      | 9.42        | V            |
| 7942.5          | -52.59   | 5.48                 | 3.00     | 13.66                           | -44.41          | -25.00      | 19.41       | V            |

**LTE Band 41\_Channel Bandwidth 20MHz\_16QAM\_1RB#0**

| Frequency (MHz) | Ps (dBm) | P <sub>cl</sub> (dB) | Diatance | G <sub>a</sub> Antenna Gain(dB) | Peak EIRP (dBm) | Limit (dBm) | Margin (dB) | Polarization |
|-----------------|----------|----------------------|----------|---------------------------------|-----------------|-------------|-------------|--------------|
| 5290.0          | -43.07   | 4.45                 | 3.00     | 12.45                           | -35.07          | -25.00      | 10.07       | H            |
| 7935.0          | -53.11   | 5.47                 | 3.00     | 13.66                           | -44.92          | -25.00      | 19.92       | H            |
| 5290.0          | -44.65   | 4.45                 | 3.00     | 12.45                           | -36.65          | -25.00      | 11.65       | V            |
| 7935.0          | -51.44   | 5.48                 | 3.00     | 13.66                           | -43.26          | -25.00      | 18.26       | V            |

Series Model No.: P5 pro

**LTE Band 41\_Channel Bandwidth 5MHz\_QPSK\_1RB#0**

| Frequency (MHz) | Ps (dBm) | P <sub>cl</sub> (dB) | Diatance | G <sub>a</sub> Antenna Gain(dB) | Peak EIRP (dBm) | Limit (dBm) | Margin (dB) | Polarization |
|-----------------|----------|----------------------|----------|---------------------------------|-----------------|-------------|-------------|--------------|
| 5305.0          | -41.77   | 4.45                 | 3.00     | 12.45                           | -33.77          | -25.00      | 8.77        | H            |
| 7957.5          | -52.43   | 5.47                 | 3.00     | 13.66                           | -44.24          | -25.00      | 19.24       | H            |
| 5305.0          | -45.21   | 4.45                 | 3.00     | 12.45                           | -37.21          | -25.00      | 12.21       | V            |
| 7957.5          | -53.71   | 5.48                 | 3.00     | 13.66                           | -45.53          | -25.00      | 20.53       | V            |

**LTE Band 41\_Channel Bandwidth 10MHz\_QPSK\_1RB#0**

| Frequency (MHz) | Ps (dBm) | P <sub>cl</sub> (dB) | Diatance | G <sub>a</sub> Antenna Gain(dB) | Peak EIRP (dBm) | Limit (dBm) | Margin (dB) | Polarization |
|-----------------|----------|----------------------|----------|---------------------------------|-----------------|-------------|-------------|--------------|
| 5300.0          | -43.6    | 4.45                 | 3.00     | 12.45                           | -35.6           | -25.00      | 10.6        | H            |
| 7950.0          | -52.51   | 5.47                 | 3.00     | 13.66                           | -44.32          | -25.00      | 19.32       | H            |
| 5300.0          | -45.23   | 4.45                 | 3.00     | 12.45                           | -37.23          | -25.00      | 12.23       | V            |
| 7950.0          | -52.62   | 5.48                 | 3.00     | 13.66                           | -44.44          | -25.00      | 19.44       | V            |

**LTE Band 41\_Channel Bandwidth 15MHz\_QPSK\_1RB#0**

| Frequency (MHz) | Ps (dBm) | P <sub>cl</sub> (dB) | Diatance | G <sub>a</sub> Antenna Gain(dB) | Peak EIRP (dBm) | Limit (dBm) | Margin (dB) | Polarization |
|-----------------|----------|----------------------|----------|---------------------------------|-----------------|-------------|-------------|--------------|
| 5295.0          | -42.32   | 4.45                 | 3.00     | 12.45                           | -34.32          | -25.00      | 9.32        | H            |
| 7942.5          | -51.67   | 5.47                 | 3.00     | 13.66                           | -43.48          | -25.00      | 18.48       | H            |
| 5295.0          | -43.55   | 4.45                 | 3.00     | 12.45                           | -35.55          | -25.00      | 10.55       | V            |
| 7942.5          | -52.92   | 5.48                 | 3.00     | 13.66                           | -44.74          | -25.00      | 19.74       | V            |

**LTE Band 41\_Channel Bandwidth 20MHz\_QPSK\_1RB#0**

| Frequency (MHz) | Ps (dBm) | P <sub>cl</sub> (dB) | Diatance | G <sub>a</sub> Antenna Gain(dB) | Peak EIRP (dBm) | Limit (dBm) | Margin (dB) | Polarization |
|-----------------|----------|----------------------|----------|---------------------------------|-----------------|-------------|-------------|--------------|
| 5290.0          | -42.76   | 4.45                 | 3.00     | 12.45                           | -34.76          | -25.00      | 9.76        | H            |
| 7935.0          | -53.42   | 5.47                 | 3.00     | 13.66                           | -45.23          | -25.00      | 20.23       | H            |
| 5290.0          | -44.76   | 4.45                 | 3.00     | 12.45                           | -36.76          | -25.00      | 11.76       | V            |
| 7935.0          | -51.12   | 5.48                 | 3.00     | 13.66                           | -42.94          | -25.00      | 17.94       | V            |

**LTE Band 41\_Channel Bandwidth 5MHz\_16QAM\_1RB#0**

| Frequency (MHz) | Ps (dBm) | P <sub>cl</sub> (dB) | Diatance | G <sub>a</sub> Antenna Gain(dB) | Peak EIRP (dBm) | Limit (dBm) | Margin (dB) | Polarization |
|-----------------|----------|----------------------|----------|---------------------------------|-----------------|-------------|-------------|--------------|
| 5305.0          | -41.47   | 4.45                 | 3.00     | 12.45                           | -33.47          | -25.00      | 8.47        | H            |
| 7957.5          | -51.86   | 5.47                 | 3.00     | 13.66                           | -43.67          | -25.00      | 18.67       | H            |
| 5305.0          | -42.73   | 4.45                 | 3.00     | 12.45                           | -34.73          | -25.00      | 9.73        | V            |
| 7957.5          | -52.9    | 5.48                 | 3.00     | 13.66                           | -44.72          | -25.00      | 19.72       | V            |

**LTE Band 41\_Channel Bandwidth 10MHz\_16QAM\_1RB#0**

| Frequency (MHz) | Ps (dBm) | P <sub>cl</sub> (dB) | Diatance | G <sub>a</sub> Antenna Gain(dB) | Peak EIRP (dBm) | Limit (dBm) | Margin (dB) | Polarization |
|-----------------|----------|----------------------|----------|---------------------------------|-----------------|-------------|-------------|--------------|
| 5300.0          | -42.78   | 4.45                 | 3.00     | 12.45                           | -34.78          | -25.00      | 9.78        | H            |
| 7950.0          | -52.4    | 5.47                 | 3.00     | 13.66                           | -44.21          | -25.00      | 19.21       | H            |
| 5300.0          | -43.23   | 4.45                 | 3.00     | 12.45                           | -35.23          | -25.00      | 10.23       | V            |
| 7950.0          | -53.27   | 5.48                 | 3.00     | 13.66                           | -45.09          | -25.00      | 20.09       | V            |

**LTE Band 41\_Channel Bandwidth 15MHz\_16QAM\_1RB#0**

| Frequency (MHz) | Ps (dBm) | P <sub>cl</sub> (dB) | Diatance | G <sub>a</sub> Antenna Gain(dB) | Peak EIRP (dBm) | Limit (dBm) | Margin (dB) | Polarization |
|-----------------|----------|----------------------|----------|---------------------------------|-----------------|-------------|-------------|--------------|
| 5295.0          | -43.41   | 4.45                 | 3.00     | 12.45                           | -35.41          | -25.00      | 10.41       | H            |
| 7942.5          | -52.44   | 5.47                 | 3.00     | 13.66                           | -44.25          | -25.00      | 19.25       | H            |
| 5295.0          | -43.11   | 4.45                 | 3.00     | 12.45                           | -35.11          | -25.00      | 10.11       | V            |
| 7942.5          | -51.59   | 5.48                 | 3.00     | 13.66                           | -43.41          | -25.00      | 18.41       | V            |

**LTE Band 41\_Channel Bandwidth 20MHz\_16QAM\_1RB#0**

| Frequency (MHz) | Ps (dBm) | P <sub>cl</sub> (dB) | Diatance | G <sub>a</sub> Antenna Gain(dB) | Peak EIRP (dBm) | Limit (dBm) | Margin (dB) | Polarization |
|-----------------|----------|----------------------|----------|---------------------------------|-----------------|-------------|-------------|--------------|
| 5290.0          | -42.39   | 4.45                 | 3.00     | 12.45                           | -34.39          | -25.00      | 9.39        | H            |
| 7935.0          | -53.12   | 5.47                 | 3.00     | 13.66                           | -44.93          | -25.00      | 19.93       | H            |
| 5290.0          | -43.26   | 4.45                 | 3.00     | 12.45                           | -35.26          | -25.00      | 10.26       | V            |
| 7935.0          | -52.04   | 5.48                 | 3.00     | 13.66                           | -43.86          | -25.00      | 18.86       | V            |

Series Model No.: E50 Ultra

**LTE Band 41\_Channel Bandwidth 5MHz\_QPSK\_1RB#0**

| Frequency (MHz) | Ps (dBm) | P <sub>cl</sub> (dB) | Diatance | G <sub>a</sub> Antenna Gain(dB) | Peak EIRP (dBm) | Limit (dBm) | Margin (dB) | Polarization |
|-----------------|----------|----------------------|----------|---------------------------------|-----------------|-------------|-------------|--------------|
| 5305.0          | -41.49   | 4.45                 | 3.00     | 12.45                           | -33.49          | -25.00      | 8.49        | H            |
| 7957.5          | -54.44   | 5.47                 | 3.00     | 13.66                           | -46.25          | -25.00      | 21.25       | H            |
| 5305.0          | -43.65   | 4.45                 | 3.00     | 12.45                           | -35.65          | -25.00      | 10.65       | V            |
| 7957.5          | -53.3    | 5.48                 | 3.00     | 13.66                           | -45.12          | -25.00      | 20.12       | V            |

**LTE Band 41\_Channel Bandwidth 10MHz\_QPSK\_1RB#0**

| Frequency (MHz) | Ps (dBm) | P <sub>cl</sub> (dB) | Diatance | G <sub>a</sub> Antenna Gain(dB) | Peak EIRP (dBm) | Limit (dBm) | Margin (dB) | Polarization |
|-----------------|----------|----------------------|----------|---------------------------------|-----------------|-------------|-------------|--------------|
| 5300.0          | -43.67   | 4.45                 | 3.00     | 12.45                           | -35.67          | -25.00      | 10.67       | H            |
| 7950.0          | -53.4    | 5.47                 | 3.00     | 13.66                           | -45.21          | -25.00      | 20.21       | H            |
| 5300.0          | -43.36   | 4.45                 | 3.00     | 12.45                           | -35.36          | -25.00      | 10.36       | V            |
| 7950.0          | -52.69   | 5.48                 | 3.00     | 13.66                           | -44.51          | -25.00      | 19.51       | V            |

**LTE Band 41\_Channel Bandwidth 15MHz\_QPSK\_1RB#0**

| Frequency (MHz) | Ps (dBm) | P <sub>cl</sub> (dB) | Diatance | G <sub>a</sub> Antenna Gain(dB) | Peak EIRP (dBm) | Limit (dBm) | Margin (dB) | Polarization |
|-----------------|----------|----------------------|----------|---------------------------------|-----------------|-------------|-------------|--------------|
| 5295.0          | -43.72   | 4.45                 | 3.00     | 12.45                           | -35.72          | -25.00      | 10.72       | H            |
| 7942.5          | -52.89   | 5.47                 | 3.00     | 13.66                           | -44.7           | -25.00      | 19.7        | H            |
| 5295.0          | -42.94   | 4.45                 | 3.00     | 12.45                           | -34.94          | -25.00      | 9.94        | V            |
| 7942.5          | -52.97   | 5.48                 | 3.00     | 13.66                           | -44.79          | -25.00      | 19.79       | V            |

**LTE Band 41\_Channel Bandwidth 20MHz\_QPSK\_1RB#0**

| Frequency (MHz) | Ps (dBm) | P <sub>cl</sub> (dB) | Diatance | G <sub>a</sub> Antenna Gain(dB) | Peak EIRP (dBm) | Limit (dBm) | Margin (dB) | Polarization |
|-----------------|----------|----------------------|----------|---------------------------------|-----------------|-------------|-------------|--------------|
| 5290.0          | -43.64   | 4.45                 | 3.00     | 12.45                           | -35.64          | -25.00      | 10.64       | H            |
| 7935.0          | -52.15   | 5.47                 | 3.00     | 13.66                           | -43.96          | -25.00      | 18.96       | H            |
| 5290.0          | -43.86   | 4.45                 | 3.00     | 12.45                           | -35.86          | -25.00      | 10.86       | V            |
| 7935.0          | -51.52   | 5.48                 | 3.00     | 13.66                           | -43.34          | -25.00      | 18.34       | V            |

**LTE Band 41\_Channel Bandwidth 5MHz\_16QAM\_1RB#0**

| Frequency (MHz) | Ps (dBm) | P <sub>cl</sub> (dB) | Diatance | G <sub>a</sub> Antenna Gain(dB) | Peak EIRP (dBm) | Limit (dBm) | Margin (dB) | Polarization |
|-----------------|----------|----------------------|----------|---------------------------------|-----------------|-------------|-------------|--------------|
| 5305.0          | -43.7    | 4.45                 | 3.00     | 12.45                           | -35.7           | -25.00      | 10.7        | H            |
| 7957.5          | -52.61   | 5.47                 | 3.00     | 13.66                           | -44.42          | -25.00      | 19.42       | H            |
| 5305.0          | -44.44   | 4.45                 | 3.00     | 12.45                           | -36.44          | -25.00      | 11.44       | V            |
| 7957.5          | -52.93   | 5.48                 | 3.00     | 13.66                           | -44.75          | -25.00      | 19.75       | V            |

**LTE Band 41\_Channel Bandwidth 10MHz\_16QAM\_1RB#0**

| Frequency (MHz) | Ps (dBm) | P <sub>cl</sub> (dB) | Diatance | G <sub>a</sub> Antenna Gain(dB) | Peak EIRP (dBm) | Limit (dBm) | Margin (dB) | Polarization |
|-----------------|----------|----------------------|----------|---------------------------------|-----------------|-------------|-------------|--------------|
| 5300.0          | -42.82   | 4.45                 | 3.00     | 12.45                           | -34.82          | -25.00      | 9.82        | H            |
| 7950.0          | -52.92   | 5.47                 | 3.00     | 13.66                           | -44.73          | -25.00      | 19.73       | H            |
| 5300.0          | -43.65   | 4.45                 | 3.00     | 12.45                           | -35.65          | -25.00      | 10.65       | V            |
| 7950.0          | -53.84   | 5.48                 | 3.00     | 13.66                           | -45.66          | -25.00      | 20.66       | V            |

**LTE Band 41\_Channel Bandwidth 15MHz\_16QAM\_1RB#0**

| Frequency (MHz) | Ps (dBm) | P <sub>cl</sub> (dB) | Diatance | G <sub>a</sub> Antenna Gain(dB) | Peak EIRP (dBm) | Limit (dBm) | Margin (dB) | Polarization |
|-----------------|----------|----------------------|----------|---------------------------------|-----------------|-------------|-------------|--------------|
| 5295.0          | -42.74   | 4.45                 | 3.00     | 12.45                           | -34.74          | -25.00      | 9.74        | H            |
| 7942.5          | -51.77   | 5.47                 | 3.00     | 13.66                           | -43.58          | -25.00      | 18.58       | H            |
| 5295.0          | -45.25   | 4.45                 | 3.00     | 12.45                           | -37.25          | -25.00      | 12.25       | V            |
| 7942.5          | -52.15   | 5.48                 | 3.00     | 13.66                           | -43.97          | -25.00      | 18.97       | V            |

**LTE Band 41\_Channel Bandwidth 20MHz\_16QAM\_1RB#0**

| Frequency (MHz) | Ps (dBm) | P <sub>cl</sub> (dB) | Diatance | G <sub>a</sub> Antenna Gain(dB) | Peak EIRP (dBm) | Limit (dBm) | Margin (dB) | Polarization |
|-----------------|----------|----------------------|----------|---------------------------------|-----------------|-------------|-------------|--------------|
| 5290.0          | -42.16   | 4.45                 | 3.00     | 12.45                           | -34.16          | -25.00      | 9.16        | H            |
| 7935.0          | -52.73   | 5.47                 | 3.00     | 13.66                           | -44.54          | -25.00      | 19.54       | H            |
| 5290.0          | -43.61   | 4.45                 | 3.00     | 12.45                           | -35.61          | -25.00      | 10.61       | V            |
| 7935.0          | -52.79   | 5.48                 | 3.00     | 13.66                           | -44.61          | -25.00      | 19.61       | V            |



Series Model No.: I16 pro max

## LTE Band 41 Channel Bandwidth 5MHz\_QPSK\_1RB#0

| Frequency (MHz) | Ps (dBm) | P <sub>cl</sub> (dB) | Diatance | G <sub>a</sub> Antenna Gain(dB) | Peak EIRP (dBm) | Limit (dBm) | Margin (dB) | Polarization |
|-----------------|----------|----------------------|----------|---------------------------------|-----------------|-------------|-------------|--------------|
| 5305.0          | -42.06   | 4.45                 | 3.00     | 12.45                           | -34.06          | -25.00      | 9.06        | H            |
| 7957.5          | -52.21   | 5.47                 | 3.00     | 13.66                           | -44.02          | -25.00      | 19.02       | H            |
| 5305.0          | -44.86   | 4.45                 | 3.00     | 12.45                           | -36.86          | -25.00      | 11.86       | V            |
| 7957.5          | -53.64   | 5.48                 | 3.00     | 13.66                           | -45.46          | -25.00      | 20.46       | V            |

## LTE Band 41 Channel Bandwidth 10MHz\_QPSK\_1RB#0

| Frequency (MHz) | Ps (dBm) | P <sub>cl</sub> (dB) | Diatance | G <sub>a</sub> Antenna Gain(dB) | Peak EIRP (dBm) | Limit (dBm) | Margin (dB) | Polarization |
|-----------------|----------|----------------------|----------|---------------------------------|-----------------|-------------|-------------|--------------|
| 5300.0          | -42.19   | 4.45                 | 3.00     | 12.45                           | -34.19          | -25.00      | 9.19        | H            |
| 7950.0          | -53.12   | 5.47                 | 3.00     | 13.66                           | -44.93          | -25.00      | 19.93       | H            |
| 5300.0          | -44.48   | 4.45                 | 3.00     | 12.45                           | -36.48          | -25.00      | 11.48       | V            |
| 7950.0          | -52      | 5.48                 | 3.00     | 13.66                           | -43.82          | -25.00      | 18.82       | V            |

## LTE Band 41 Channel Bandwidth 15MHz\_QPSK\_1RB#0

| Frequency (MHz) | Ps (dBm) | P <sub>cl</sub> (dB) | Diatance | G <sub>a</sub> Antenna Gain(dB) | Peak EIRP (dBm) | Limit (dBm) | Margin (dB) | Polarization |
|-----------------|----------|----------------------|----------|---------------------------------|-----------------|-------------|-------------|--------------|
| 5295.0          | -43.76   | 4.45                 | 3.00     | 12.45                           | -35.76          | -25.00      | 10.76       | H            |
| 7942.5          | -52.05   | 5.47                 | 3.00     | 13.66                           | -43.86          | -25.00      | 18.86       | H            |
| 5295.0          | -44.41   | 4.45                 | 3.00     | 12.45                           | -36.41          | -25.00      | 11.41       | V            |
| 7942.5          | -51.1    | 5.48                 | 3.00     | 13.66                           | -42.92          | -25.00      | 17.92       | V            |

## LTE Band 41 Channel Bandwidth 20MHz\_QPSK\_1RB#0

| Frequency (MHz) | Ps (dBm) | P <sub>cl</sub> (dB) | Diatance | G <sub>a</sub> Antenna Gain(dB) | Peak EIRP (dBm) | Limit (dBm) | Margin (dB) | Polarization |
|-----------------|----------|----------------------|----------|---------------------------------|-----------------|-------------|-------------|--------------|
| 5290.0          | -41.1    | 4.45                 | 3.00     | 12.45                           | -33.1           | -25.00      | 8.1         | H            |
| 7935.0          | -52.7    | 5.47                 | 3.00     | 13.66                           | -44.51          | -25.00      | 19.51       | H            |
| 5290.0          | -42.64   | 4.45                 | 3.00     | 12.45                           | -34.64          | -25.00      | 9.64        | V            |
| 7935.0          | -51.05   | 5.48                 | 3.00     | 13.66                           | -42.87          | -25.00      | 17.87       | V            |

## LTE Band 41 Channel Bandwidth 5MHz\_16QAM\_1RB#0

| Frequency (MHz) | Ps (dBm) | P <sub>cl</sub> (dB) | Diatance | G <sub>a</sub> Antenna Gain(dB) | Peak EIRP (dBm) | Limit (dBm) | Margin (dB) | Polarization |
|-----------------|----------|----------------------|----------|---------------------------------|-----------------|-------------|-------------|--------------|
| 5305.0          | -42.21   | 4.45                 | 3.00     | 12.45                           | -34.21          | -25.00      | 9.21        | H            |
| 7957.5          | -52.56   | 5.47                 | 3.00     | 13.66                           | -44.37          | -25.00      | 19.37       | H            |
| 5305.0          | -43.08   | 4.45                 | 3.00     | 12.45                           | -35.08          | -25.00      | 10.08       | V            |
| 7957.5          | -53.55   | 5.48                 | 3.00     | 13.66                           | -45.37          | -25.00      | 20.37       | V            |

## LTE Band 41 Channel Bandwidth 10MHz\_16QAM\_1RB#0

| Frequency (MHz) | Ps (dBm) | P <sub>cl</sub> (dB) | Diatance | G <sub>a</sub> Antenna Gain(dB) | Peak EIRP (dBm) | Limit (dBm) | Margin (dB) | Polarization |
|-----------------|----------|----------------------|----------|---------------------------------|-----------------|-------------|-------------|--------------|
| 5300.0          | -43.39   | 4.45                 | 3.00     | 12.45                           | -35.39          | -25.00      | 10.39       | H            |
| 7950.0          | -51.7    | 5.47                 | 3.00     | 13.66                           | -43.51          | -25.00      | 18.51       | H            |
| 5300.0          | -42.86   | 4.45                 | 3.00     | 12.45                           | -34.86          | -25.00      | 9.86        | V            |
| 7950.0          | -53.87   | 5.48                 | 3.00     | 13.66                           | -45.69          | -25.00      | 20.69       | V            |

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**LTE Band 41\_Channel Bandwidth 15MHz\_16QAM\_1RB#0**

| Frequency (MHz) | Ps (dBm) | P <sub>cl</sub> (dB) | Diatance | G <sub>a</sub> Antenna Gain(dB) | Peak EIRP (dBm) | Limit (dBm) | Margin (dB) | Polarization |
|-----------------|----------|----------------------|----------|---------------------------------|-----------------|-------------|-------------|--------------|
| 5295.0          | -41.74   | 4.45                 | 3.00     | 12.45                           | -33.74          | -25.00      | 8.74        | H            |
| 7942.5          | -53.6    | 5.47                 | 3.00     | 13.66                           | -45.41          | -25.00      | 20.41       | H            |
| 5295.0          | -44.85   | 4.45                 | 3.00     | 12.45                           | -36.85          | -25.00      | 11.85       | V            |
| 7942.5          | -53.55   | 5.48                 | 3.00     | 13.66                           | -45.37          | -25.00      | 20.37       | V            |

**LTE Band 41\_Channel Bandwidth 20MHz\_16QAM\_1RB#0**

| Frequency (MHz) | Ps (dBm) | P <sub>cl</sub> (dB) | Diatance | G <sub>a</sub> Antenna Gain(dB) | Peak EIRP (dBm) | Limit (dBm) | Margin (dB) | Polarization |
|-----------------|----------|----------------------|----------|---------------------------------|-----------------|-------------|-------------|--------------|
| 5290.0          | -43.61   | 4.45                 | 3.00     | 12.45                           | -35.61          | -25.00      | 10.61       | H            |
| 7935.0          | -53.98   | 5.47                 | 3.00     | 13.66                           | -45.79          | -25.00      | 20.79       | H            |
| 5290.0          | -44.42   | 4.45                 | 3.00     | 12.45                           | -36.42          | -25.00      | 11.42       | V            |
| 7935.0          | -53.7    | 5.48                 | 3.00     | 13.66                           | -45.52          | -25.00      | 20.52       | V            |

Series Model No.: P6 pro

**LTE Band 41\_Channel Bandwidth 5MHz\_QPSK\_1RB#0**

| Frequency (MHz) | Ps (dBm) | P <sub>cl</sub> (dB) | Diatance | G <sub>a</sub> Antenna Gain(dB) | Peak EIRP (dBm) | Limit (dBm) | Margin (dB) | Polarization |
|-----------------|----------|----------------------|----------|---------------------------------|-----------------|-------------|-------------|--------------|
| 5305.0          | -41.32   | 4.45                 | 3.00     | 12.45                           | -33.32          | -25.00      | 8.32        | H            |
| 7957.5          | -53.09   | 5.47                 | 3.00     | 13.66                           | -44.9           | -25.00      | 19.9        | H            |
| 5305.0          | -43.89   | 4.45                 | 3.00     | 12.45                           | -35.89          | -25.00      | 10.89       | V            |
| 7957.5          | -51.14   | 5.48                 | 3.00     | 13.66                           | -42.96          | -25.00      | 17.96       | V            |

**LTE Band 41\_Channel Bandwidth 10MHz\_QPSK\_1RB#0**

| Frequency (MHz) | Ps (dBm) | P <sub>cl</sub> (dB) | Diatance | G <sub>a</sub> Antenna Gain(dB) | Peak EIRP (dBm) | Limit (dBm) | Margin (dB) | Polarization |
|-----------------|----------|----------------------|----------|---------------------------------|-----------------|-------------|-------------|--------------|
| 5300.0          | -41.88   | 4.45                 | 3.00     | 12.45                           | -33.88          | -25.00      | 8.88        | H            |
| 7950.0          | -51.98   | 5.47                 | 3.00     | 13.66                           | -43.79          | -25.00      | 18.79       | H            |
| 5300.0          | -42.86   | 4.45                 | 3.00     | 12.45                           | -34.86          | -25.00      | 9.86        | V            |
| 7950.0          | -50.97   | 5.48                 | 3.00     | 13.66                           | -42.79          | -25.00      | 17.79       | V            |

**LTE Band 41\_Channel Bandwidth 15MHz\_QPSK\_1RB#0**

| Frequency (MHz) | Ps (dBm) | P <sub>cl</sub> (dB) | Diatance | G <sub>a</sub> Antenna Gain(dB) | Peak EIRP (dBm) | Limit (dBm) | Margin (dB) | Polarization |
|-----------------|----------|----------------------|----------|---------------------------------|-----------------|-------------|-------------|--------------|
| 5295.0          | -41.67   | 4.45                 | 3.00     | 12.45                           | -33.67          | -25.00      | 8.67        | H            |
| 7942.5          | -52.44   | 5.47                 | 3.00     | 13.66                           | -44.25          | -25.00      | 19.25       | H            |
| 5295.0          | -43.15   | 4.45                 | 3.00     | 12.45                           | -35.15          | -25.00      | 10.15       | V            |
| 7942.5          | -53.78   | 5.48                 | 3.00     | 13.66                           | -45.6           | -25.00      | 20.6        | V            |

**LTE Band 41\_Channel Bandwidth 20MHz\_QPSK\_1RB#0**

| Frequency (MHz) | Ps (dBm) | P <sub>cl</sub> (dB) | Diatance | G <sub>a</sub> Antenna Gain(dB) | Peak EIRP (dBm) | Limit (dBm) | Margin (dB) | Polarization |
|-----------------|----------|----------------------|----------|---------------------------------|-----------------|-------------|-------------|--------------|
| 5290.0          | -42.16   | 4.45                 | 3.00     | 12.45                           | -34.16          | -25.00      | 9.16        | H            |
| 7935.0          | -52.97   | 5.47                 | 3.00     | 13.66                           | -44.78          | -25.00      | 19.78       | H            |
| 5290.0          | -43.6    | 4.45                 | 3.00     | 12.45                           | -35.6           | -25.00      | 10.6        | V            |
| 7935.0          | -52.57   | 5.48                 | 3.00     | 13.66                           | -44.39          | -25.00      | 19.39       | V            |

**LTE Band 41\_Channel Bandwidth 5MHz\_16QAM\_1RB#0**

| Frequency (MHz) | Ps (dBm) | P <sub>cl</sub> (dB) | Diatance | G <sub>a</sub> Antenna Gain(dB) | Peak EIRP (dBm) | Limit (dBm) | Margin (dB) | Polarization |
|-----------------|----------|----------------------|----------|---------------------------------|-----------------|-------------|-------------|--------------|
| 5305.0          | -43.58   | 4.45                 | 3.00     | 12.45                           | -35.58          | -25.00      | 10.58       | H            |
| 7957.5          | -54.04   | 5.47                 | 3.00     | 13.66                           | -45.85          | -25.00      | 20.85       | H            |
| 5305.0          | -44.18   | 4.45                 | 3.00     | 12.45                           | -36.18          | -25.00      | 11.18       | V            |
| 7957.5          | -53.42   | 5.48                 | 3.00     | 13.66                           | -45.24          | -25.00      | 20.24       | V            |

**LTE Band 41\_Channel Bandwidth 10MHz\_16QAM\_1RB#0**

| Frequency (MHz) | Ps (dBm) | P <sub>cl</sub> (dB) | Diatance | G <sub>a</sub> Antenna Gain(dB) | Peak EIRP (dBm) | Limit (dBm) | Margin (dB) | Polarization |
|-----------------|----------|----------------------|----------|---------------------------------|-----------------|-------------|-------------|--------------|
| 5300.0          | -41.42   | 4.45                 | 3.00     | 12.45                           | -33.42          | -25.00      | 8.42        | H            |
| 7950.0          | -53.22   | 5.47                 | 3.00     | 13.66                           | -45.03          | -25.00      | 20.03       | H            |
| 5300.0          | -44.48   | 4.45                 | 3.00     | 12.45                           | -36.48          | -25.00      | 11.48       | V            |
| 7950.0          | -53.04   | 5.48                 | 3.00     | 13.66                           | -44.86          | -25.00      | 19.86       | V            |

**LTE Band 41\_Channel Bandwidth 15MHz\_16QAM\_1RB#0**

| Frequency (MHz) | Ps (dBm) | P <sub>cl</sub> (dB) | Diatance | G <sub>a</sub> Antenna Gain(dB) | Peak EIRP (dBm) | Limit (dBm) | Margin (dB) | Polarization |
|-----------------|----------|----------------------|----------|---------------------------------|-----------------|-------------|-------------|--------------|
| 5295.0          | -43.48   | 4.45                 | 3.00     | 12.45                           | -35.48          | -25.00      | 10.48       | H            |
| 7942.5          | -54.32   | 5.47                 | 3.00     | 13.66                           | -46.13          | -25.00      | 21.13       | H            |
| 5295.0          | -44      | 4.45                 | 3.00     | 12.45                           | -36             | -25.00      | 11          | V            |
| 7942.5          | -51.24   | 5.48                 | 3.00     | 13.66                           | -43.06          | -25.00      | 18.06       | V            |

**LTE Band 41\_Channel Bandwidth 20MHz\_16QAM\_1RB#0**

| Frequency (MHz) | Ps (dBm) | P <sub>cl</sub> (dB) | Diatance | G <sub>a</sub> Antenna Gain(dB) | Peak EIRP (dBm) | Limit (dBm) | Margin (dB) | Polarization |
|-----------------|----------|----------------------|----------|---------------------------------|-----------------|-------------|-------------|--------------|
| 5290.0          | -43.27   | 4.45                 | 3.00     | 12.45                           | -35.27          | -25.00      | 10.27       | H            |
| 7935.0          | -53.01   | 5.47                 | 3.00     | 13.66                           | -44.82          | -25.00      | 19.82       | H            |
| 5290.0          | -42.62   | 4.45                 | 3.00     | 12.45                           | -34.62          | -25.00      | 9.62        | V            |
| 7935.0          | -51.19   | 5.48                 | 3.00     | 13.66                           | -43.01          | -25.00      | 18.01       | V            |

Series Model No.: Sp20 Pro

**LTE Band 41\_Channel Bandwidth 5MHz\_QPSK\_1RB#0**

| Frequency (MHz) | Ps (dBm) | P <sub>cl</sub> (dB) | Diatance | G <sub>a</sub> Antenna Gain(dB) | Peak EIRP (dBm) | Limit (dBm) | Margin (dB) | Polarization |
|-----------------|----------|----------------------|----------|---------------------------------|-----------------|-------------|-------------|--------------|
| 5305.0          | -41.57   | 4.45                 | 3.00     | 12.45                           | -33.57          | -25.00      | 8.57        | H            |
| 7957.5          | -51.67   | 5.47                 | 3.00     | 13.66                           | -43.48          | -25.00      | 18.48       | H            |
| 5305.0          | -43.73   | 4.45                 | 3.00     | 12.45                           | -35.73          | -25.00      | 10.73       | V            |
| 7957.5          | -50.99   | 5.48                 | 3.00     | 13.66                           | -42.81          | -25.00      | 17.81       | V            |

**LTE Band 41\_Channel Bandwidth 10MHz\_QPSK\_1RB#0**

| Frequency (MHz) | Ps (dBm) | P <sub>cl</sub> (dB) | Diatance | G <sub>a</sub> Antenna Gain(dB) | Peak EIRP (dBm) | Limit (dBm) | Margin (dB) | Polarization |
|-----------------|----------|----------------------|----------|---------------------------------|-----------------|-------------|-------------|--------------|
| 5300.0          | -42.15   | 4.45                 | 3.00     | 12.45                           | -34.15          | -25.00      | 9.15        | H            |
| 7950.0          | -52.17   | 5.47                 | 3.00     | 13.66                           | -43.98          | -25.00      | 18.98       | H            |
| 5300.0          | -45.11   | 4.45                 | 3.00     | 12.45                           | -37.11          | -25.00      | 12.11       | V            |
| 7950.0          | -51.36   | 5.48                 | 3.00     | 13.66                           | -43.18          | -25.00      | 18.18       | V            |

**LTE Band 41\_Channel Bandwidth 15MHz\_QPSK\_1RB#0**

| Frequency (MHz) | Ps (dBm) | P <sub>cl</sub> (dB) | Diatance | G <sub>a</sub> Antenna Gain(dB) | Peak EIRP (dBm) | Limit (dBm) | Margin (dB) | Polarization |
|-----------------|----------|----------------------|----------|---------------------------------|-----------------|-------------|-------------|--------------|
| 5295.0          | -43.48   | 4.45                 | 3.00     | 12.45                           | -35.48          | -25.00      | 10.48       | H            |
| 7942.5          | -53.33   | 5.47                 | 3.00     | 13.66                           | -45.14          | -25.00      | 20.14       | H            |
| 5295.0          | -43.56   | 4.45                 | 3.00     | 12.45                           | -35.56          | -25.00      | 10.56       | V            |
| 7942.5          | -52.19   | 5.48                 | 3.00     | 13.66                           | -44.01          | -25.00      | 19.01       | V            |

**LTE Band 41\_Channel Bandwidth 20MHz\_QPSK\_1RB#0**

| Frequency (MHz) | Ps (dBm) | P <sub>cl</sub> (dB) | Diatance | G <sub>a</sub> Antenna Gain(dB) | Peak EIRP (dBm) | Limit (dBm) | Margin (dB) | Polarization |
|-----------------|----------|----------------------|----------|---------------------------------|-----------------|-------------|-------------|--------------|
| 5290.0          | -42.1    | 4.45                 | 3.00     | 12.45                           | -34.1           | -25.00      | 9.1         | H            |
| 7935.0          | -53.2    | 5.47                 | 3.00     | 13.66                           | -45.01          | -25.00      | 20.01       | H            |
| 5290.0          | -45.03   | 4.45                 | 3.00     | 12.45                           | -37.03          | -25.00      | 12.03       | V            |
| 7935.0          | -51.27   | 5.48                 | 3.00     | 13.66                           | -43.09          | -25.00      | 18.09       | V            |

**LTE Band 41\_Channel Bandwidth 5MHz\_16QAM\_1RB#0**

| Frequency (MHz) | Ps (dBm) | P <sub>cl</sub> (dB) | Diatance | G <sub>a</sub> Antenna Gain(dB) | Peak EIRP (dBm) | Limit (dBm) | Margin (dB) | Polarization |
|-----------------|----------|----------------------|----------|---------------------------------|-----------------|-------------|-------------|--------------|
| 5305.0          | -40.93   | 4.45                 | 3.00     | 12.45                           | -32.93          | -25.00      | 7.93        | H            |
| 7957.5          | -53.88   | 5.47                 | 3.00     | 13.66                           | -45.69          | -25.00      | 20.69       | H            |
| 5305.0          | -43.83   | 4.45                 | 3.00     | 12.45                           | -35.83          | -25.00      | 10.83       | V            |
| 7957.5          | -51.75   | 5.48                 | 3.00     | 13.66                           | -43.57          | -25.00      | 18.57       | V            |

**LTE Band 41\_Channel Bandwidth 10MHz\_16QAM\_1RB#0**

| Frequency (MHz) | Ps (dBm) | P <sub>cl</sub> (dB) | Diatance | G <sub>a</sub> Antenna Gain(dB) | Peak EIRP (dBm) | Limit (dBm) | Margin (dB) | Polarization |
|-----------------|----------|----------------------|----------|---------------------------------|-----------------|-------------|-------------|--------------|
| 5300.0          | -42.41   | 4.45                 | 3.00     | 12.45                           | -34.41          | -25.00      | 9.41        | H            |
| 7950.0          | -52.43   | 5.47                 | 3.00     | 13.66                           | -44.24          | -25.00      | 19.24       | H            |
| 5300.0          | -45.2    | 4.45                 | 3.00     | 12.45                           | -37.2           | -25.00      | 12.2        | V            |
| 7950.0          | -52.24   | 5.48                 | 3.00     | 13.66                           | -44.06          | -25.00      | 19.06       | V            |

**LTE Band 41\_Channel Bandwidth 15MHz\_16QAM\_1RB#0**

| Frequency (MHz) | Ps (dBm) | P <sub>cl</sub> (dB) | Diatance | G <sub>a</sub> Antenna Gain(dB) | Peak EIRP (dBm) | Limit (dBm) | Margin (dB) | Polarization |
|-----------------|----------|----------------------|----------|---------------------------------|-----------------|-------------|-------------|--------------|
| 5295.0          | -43.46   | 4.45                 | 3.00     | 12.45                           | -35.46          | -25.00      | 10.46       | H            |
| 7942.5          | -54.12   | 5.47                 | 3.00     | 13.66                           | -45.93          | -25.00      | 20.93       | H            |
| 5295.0          | -43.52   | 4.45                 | 3.00     | 12.45                           | -35.52          | -25.00      | 10.52       | V            |
| 7942.5          | -53.28   | 5.48                 | 3.00     | 13.66                           | -45.1           | -25.00      | 20.1        | V            |

**LTE Band 41\_Channel Bandwidth 20MHz\_16QAM\_1RB#0**

| Frequency (MHz) | Ps (dBm) | P <sub>cl</sub> (dB) | Diatance | G <sub>a</sub> Antenna Gain(dB) | Peak EIRP (dBm) | Limit (dBm) | Margin (dB) | Polarization |
|-----------------|----------|----------------------|----------|---------------------------------|-----------------|-------------|-------------|--------------|
| 5290.0          | -41.89   | 4.45                 | 3.00     | 12.45                           | -33.89          | -25.00      | 8.89        | H            |
| 7935.0          | -53.73   | 5.47                 | 3.00     | 13.66                           | -45.54          | -25.00      | 20.54       | H            |
| 5290.0          | -42.34   | 4.45                 | 3.00     | 12.45                           | -34.34          | -25.00      | 9.34        | V            |
| 7935.0          | -53.83   | 5.48                 | 3.00     | 13.66                           | -45.65          | -25.00      | 20.65       | V            |

Series Model No.: OP12 pro

**LTE Band 41 Channel Bandwidth 5MHz\_QPSK\_1RB#0**

| Frequency (MHz) | Ps (dBm) | P <sub>cl</sub> (dB) | Diatance | G <sub>a</sub> Antenna Gain(dB) | Peak EIRP (dBm) | Limit (dBm) | Margin (dB) | Polarization |
|-----------------|----------|----------------------|----------|---------------------------------|-----------------|-------------|-------------|--------------|
| 5305.0          | -42.36   | 4.45                 | 3.00     | 12.45                           | -34.36          | -25.00      | 9.36        | H            |
| 7957.5          | -53.93   | 5.47                 | 3.00     | 13.66                           | -45.74          | -25.00      | 20.74       | H            |
| 5305.0          | -43.32   | 4.45                 | 3.00     | 12.45                           | -35.32          | -25.00      | 10.32       | V            |
| 7957.5          | -53.3    | 5.48                 | 3.00     | 13.66                           | -45.12          | -25.00      | 20.12       | V            |

**LTE Band 41 Channel Bandwidth 10MHz\_QPSK\_1RB#0**

| Frequency (MHz) | Ps (dBm) | P <sub>cl</sub> (dB) | Diatance | G <sub>a</sub> Antenna Gain(dB) | Peak EIRP (dBm) | Limit (dBm) | Margin (dB) | Polarization |
|-----------------|----------|----------------------|----------|---------------------------------|-----------------|-------------|-------------|--------------|
| 5300.0          | -41.76   | 4.45                 | 3.00     | 12.45                           | -33.76          | -25.00      | 8.76        | H            |
| 7950.0          | -53.01   | 5.47                 | 3.00     | 13.66                           | -44.82          | -25.00      | 19.82       | H            |
| 5300.0          | -42.32   | 4.45                 | 3.00     | 12.45                           | -34.32          | -25.00      | 9.32        | V            |
| 7950.0          | -53.34   | 5.48                 | 3.00     | 13.66                           | -45.16          | -25.00      | 20.16       | V            |

**LTE Band 41 Channel Bandwidth 15MHz\_QPSK\_1RB#0**

| Frequency (MHz) | Ps (dBm) | P <sub>cl</sub> (dB) | Diatance | G <sub>a</sub> Antenna Gain(dB) | Peak EIRP (dBm) | Limit (dBm) | Margin (dB) | Polarization |
|-----------------|----------|----------------------|----------|---------------------------------|-----------------|-------------|-------------|--------------|
| 5295.0          | -41.04   | 4.45                 | 3.00     | 12.45                           | -33.04          | -25.00      | 8.04        | H            |
| 7942.5          | -52.45   | 5.47                 | 3.00     | 13.66                           | -44.26          | -25.00      | 19.26       | H            |
| 5295.0          | -42.94   | 4.45                 | 3.00     | 12.45                           | -34.94          | -25.00      | 9.94        | V            |
| 7942.5          | -51.7    | 5.48                 | 3.00     | 13.66                           | -43.52          | -25.00      | 18.52       | V            |

**LTE Band 41 Channel Bandwidth 20MHz\_QPSK\_1RB#0**

| Frequency (MHz) | Ps (dBm) | P <sub>cl</sub> (dB) | Diatance | G <sub>a</sub> Antenna Gain(dB) | Peak EIRP (dBm) | Limit (dBm) | Margin (dB) | Polarization |
|-----------------|----------|----------------------|----------|---------------------------------|-----------------|-------------|-------------|--------------|
| 5290.0          | -43.51   | 4.45                 | 3.00     | 12.45                           | -35.51          | -25.00      | 10.51       | H            |
| 7935.0          | -52.55   | 5.47                 | 3.00     | 13.66                           | -44.36          | -25.00      | 19.36       | H            |
| 5290.0          | -43      | 4.45                 | 3.00     | 12.45                           | -35             | -25.00      | 10          | V            |
| 7935.0          | -51.49   | 5.48                 | 3.00     | 13.66                           | -43.31          | -25.00      | 18.31       | V            |

**LTE Band 41 Channel Bandwidth 5MHz\_16QAM\_1RB#0**

| Frequency (MHz) | Ps (dBm) | P <sub>cl</sub> (dB) | Diatance | G <sub>a</sub> Antenna Gain(dB) | Peak EIRP (dBm) | Limit (dBm) | Margin (dB) | Polarization |
|-----------------|----------|----------------------|----------|---------------------------------|-----------------|-------------|-------------|--------------|
| 5305.0          | -41.26   | 4.45                 | 3.00     | 12.45                           | -33.26          | -25.00      | 8.26        | H            |
| 7957.5          | -53.06   | 5.47                 | 3.00     | 13.66                           | -44.87          | -25.00      | 19.87       | H            |
| 5305.0          | -44.21   | 4.45                 | 3.00     | 12.45                           | -36.21          | -25.00      | 11.21       | V            |
| 7957.5          | -52.95   | 5.48                 | 3.00     | 13.66                           | -44.77          | -25.00      | 19.77       | V            |

**LTE Band 41 Channel Bandwidth 10MHz\_16QAM\_1RB#0**

| Frequency (MHz) | Ps (dBm) | P <sub>cl</sub> (dB) | Diatance | G <sub>a</sub> Antenna Gain(dB) | Peak EIRP (dBm) | Limit (dBm) | Margin (dB) | Polarization |
|-----------------|----------|----------------------|----------|---------------------------------|-----------------|-------------|-------------|--------------|
| 5300.0          | -43.08   | 4.45                 | 3.00     | 12.45                           | -35.08          | -25.00      | 10.08       | H            |
| 7950.0          | -53.8    | 5.47                 | 3.00     | 13.66                           | -45.61          | -25.00      | 20.61       | H            |
| 5300.0          | -44.38   | 4.45                 | 3.00     | 12.45                           | -36.38          | -25.00      | 11.38       | V            |
| 7950.0          | -52.92   | 5.48                 | 3.00     | 13.66                           | -44.74          | -25.00      | 19.74       | V            |

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**LTE Band 41\_Channel Bandwidth 15MHz\_16QAM\_1RB#0**

| Frequency (MHz) | Ps (dBm) | P <sub>cl</sub> (dB) | Diatance | G <sub>a</sub> Antenna Gain(dB) | Peak EIRP (dBm) | Limit (dBm) | Margin (dB) | Polarization |
|-----------------|----------|----------------------|----------|---------------------------------|-----------------|-------------|-------------|--------------|
| 5295.0          | -43.74   | 4.45                 | 3.00     | 12.45                           | -35.74          | -25.00      | 10.74       | H            |
| 7942.5          | -53.26   | 5.47                 | 3.00     | 13.66                           | -45.07          | -25.00      | 20.07       | H            |
| 5295.0          | -43.31   | 4.45                 | 3.00     | 12.45                           | -35.31          | -25.00      | 10.31       | V            |
| 7942.5          | -51.64   | 5.48                 | 3.00     | 13.66                           | -43.46          | -25.00      | 18.46       | V            |

**LTE Band 41\_Channel Bandwidth 20MHz\_16QAM\_1RB#0**

| Frequency (MHz) | Ps (dBm) | P <sub>cl</sub> (dB) | Diatance | G <sub>a</sub> Antenna Gain(dB) | Peak EIRP (dBm) | Limit (dBm) | Margin (dB) | Polarization |
|-----------------|----------|----------------------|----------|---------------------------------|-----------------|-------------|-------------|--------------|
| 5290.0          | -41.33   | 4.45                 | 3.00     | 12.45                           | -33.33          | -25.00      | 8.33        | H            |
| 7935.0          | -51.63   | 5.47                 | 3.00     | 13.66                           | -43.44          | -25.00      | 18.44       | H            |
| 5290.0          | -44.84   | 4.45                 | 3.00     | 12.45                           | -36.84          | -25.00      | 11.84       | V            |
| 7935.0          | -51.93   | 5.48                 | 3.00     | 13.66                           | -43.75          | -25.00      | 18.75       | V            |

Series Model No.: T3 Pro

**LTE Band 41\_Channel Bandwidth 5MHz\_QPSK\_1RB#0**

| Frequency (MHz) | Ps (dBm) | P <sub>cl</sub> (dB) | Diatance | G <sub>a</sub> Antenna Gain(dB) | Peak EIRP (dBm) | Limit (dBm) | Margin (dB) | Polarization |
|-----------------|----------|----------------------|----------|---------------------------------|-----------------|-------------|-------------|--------------|
| 5305.0          | -42.66   | 4.45                 | 3.00     | 12.45                           | -34.66          | -25.00      | 9.66        | H            |
| 7957.5          | -54.48   | 5.47                 | 3.00     | 13.66                           | -46.29          | -25.00      | 21.29       | H            |
| 5305.0          | -44.18   | 4.45                 | 3.00     | 12.45                           | -36.18          | -25.00      | 11.18       | V            |
| 7957.5          | -53.81   | 5.48                 | 3.00     | 13.66                           | -45.63          | -25.00      | 20.63       | V            |

**LTE Band 41\_Channel Bandwidth 10MHz\_QPSK\_1RB#0**

| Frequency (MHz) | Ps (dBm) | P <sub>cl</sub> (dB) | Diatance | G <sub>a</sub> Antenna Gain(dB) | Peak EIRP (dBm) | Limit (dBm) | Margin (dB) | Polarization |
|-----------------|----------|----------------------|----------|---------------------------------|-----------------|-------------|-------------|--------------|
| 5300.0          | -43.31   | 4.45                 | 3.00     | 12.45                           | -35.31          | -25.00      | 10.31       | H            |
| 7950.0          | -52.16   | 5.47                 | 3.00     | 13.66                           | -43.97          | -25.00      | 18.97       | H            |
| 5300.0          | -44.41   | 4.45                 | 3.00     | 12.45                           | -36.41          | -25.00      | 11.41       | V            |
| 7950.0          | -52.57   | 5.48                 | 3.00     | 13.66                           | -44.39          | -25.00      | 19.39       | V            |

**LTE Band 41\_Channel Bandwidth 15MHz\_QPSK\_1RB#0**

| Frequency (MHz) | Ps (dBm) | P <sub>cl</sub> (dB) | Diatance | G <sub>a</sub> Antenna Gain(dB) | Peak EIRP (dBm) | Limit (dBm) | Margin (dB) | Polarization |
|-----------------|----------|----------------------|----------|---------------------------------|-----------------|-------------|-------------|--------------|
| 5295.0          | -43.04   | 4.45                 | 3.00     | 12.45                           | -35.04          | -25.00      | 10.04       | H            |
| 7942.5          | -52.38   | 5.47                 | 3.00     | 13.66                           | -44.19          | -25.00      | 19.19       | H            |
| 5295.0          | -42.39   | 4.45                 | 3.00     | 12.45                           | -34.39          | -25.00      | 9.39        | V            |
| 7942.5          | -52      | 5.48                 | 3.00     | 13.66                           | -43.82          | -25.00      | 18.82       | V            |

**LTE Band 41\_Channel Bandwidth 20MHz\_QPSK\_1RB#0**

| Frequency (MHz) | Ps (dBm) | P <sub>cl</sub> (dB) | Diatance | G <sub>a</sub> Antenna Gain(dB) | Peak EIRP (dBm) | Limit (dBm) | Margin (dB) | Polarization |
|-----------------|----------|----------------------|----------|---------------------------------|-----------------|-------------|-------------|--------------|
| 5290.0          | -41.37   | 4.45                 | 3.00     | 12.45                           | -33.37          | -25.00      | 8.37        | H            |
| 7935.0          | -54.19   | 5.47                 | 3.00     | 13.66                           | -46             | -25.00      | 21          | H            |
| 5290.0          | -44.99   | 4.45                 | 3.00     | 12.45                           | -36.99          | -25.00      | 11.99       | V            |
| 7935.0          | -50.95   | 5.48                 | 3.00     | 13.66                           | -42.77          | -25.00      | 17.77       | V            |

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**LTE Band 41\_Channel Bandwidth 5MHz\_16QAM\_1RB#0**

| Frequency (MHz) | Ps (dBm) | P <sub>cl</sub> (dB) | Diatance | G <sub>a</sub> Antenna Gain(dB) | Peak EIRP (dBm) | Limit (dBm) | Margin (dB) | Polarization |
|-----------------|----------|----------------------|----------|---------------------------------|-----------------|-------------|-------------|--------------|
| 5305.0          | -41.85   | 4.45                 | 3.00     | 12.45                           | -33.85          | -25.00      | 8.85        | H            |
| 7957.5          | -54.28   | 5.47                 | 3.00     | 13.66                           | -46.09          | -25.00      | 21.09       | H            |
| 5305.0          | -43.56   | 4.45                 | 3.00     | 12.45                           | -35.56          | -25.00      | 10.56       | V            |
| 7957.5          | -52.64   | 5.48                 | 3.00     | 13.66                           | -44.46          | -25.00      | 19.46       | V            |

**LTE Band 41\_Channel Bandwidth 10MHz\_16QAM\_1RB#0**

| Frequency (MHz) | Ps (dBm) | P <sub>cl</sub> (dB) | Diatance | G <sub>a</sub> Antenna Gain(dB) | Peak EIRP (dBm) | Limit (dBm) | Margin (dB) | Polarization |
|-----------------|----------|----------------------|----------|---------------------------------|-----------------|-------------|-------------|--------------|
| 5300.0          | -43.4    | 4.45                 | 3.00     | 12.45                           | -35.4           | -25.00      | 10.4        | H            |
| 7950.0          | -52.41   | 5.47                 | 3.00     | 13.66                           | -44.22          | -25.00      | 19.22       | H            |
| 5300.0          | -45.27   | 4.45                 | 3.00     | 12.45                           | -37.27          | -25.00      | 12.27       | V            |
| 7950.0          | -52.95   | 5.48                 | 3.00     | 13.66                           | -44.77          | -25.00      | 19.77       | V            |

**LTE Band 41\_Channel Bandwidth 15MHz\_16QAM\_1RB#0**

| Frequency (MHz) | Ps (dBm) | P <sub>cl</sub> (dB) | Diatance | G <sub>a</sub> Antenna Gain(dB) | Peak EIRP (dBm) | Limit (dBm) | Margin (dB) | Polarization |
|-----------------|----------|----------------------|----------|---------------------------------|-----------------|-------------|-------------|--------------|
| 5295.0          | -41.04   | 4.45                 | 3.00     | 12.45                           | -33.04          | -25.00      | 8.04        | H            |
| 7942.5          | -52.99   | 5.47                 | 3.00     | 13.66                           | -44.8           | -25.00      | 19.8        | H            |
| 5295.0          | -43.21   | 4.45                 | 3.00     | 12.45                           | -35.21          | -25.00      | 10.21       | V            |
| 7942.5          | -52.78   | 5.48                 | 3.00     | 13.66                           | -44.6           | -25.00      | 19.6        | V            |

**LTE Band 41\_Channel Bandwidth 20MHz\_16QAM\_1RB#0**

| Frequency (MHz) | Ps (dBm) | P <sub>cl</sub> (dB) | Diatance | G <sub>a</sub> Antenna Gain(dB) | Peak EIRP (dBm) | Limit (dBm) | Margin (dB) | Polarization |
|-----------------|----------|----------------------|----------|---------------------------------|-----------------|-------------|-------------|--------------|
| 5290.0          | -41.63   | 4.45                 | 3.00     | 12.45                           | -33.63          | -25.00      | 8.63        | H            |
| 7935.0          | -53.38   | 5.47                 | 3.00     | 13.66                           | -45.19          | -25.00      | 20.19       | H            |
| 5290.0          | -45.06   | 4.45                 | 3.00     | 12.45                           | -37.06          | -25.00      | 12.06       | V            |
| 7935.0          | -52.26   | 5.48                 | 3.00     | 13.66                           | -44.08          | -25.00      | 19.08       | V            |

Series Model No.: P8 Pro

**LTE Band 41\_Channel Bandwidth 5MHz\_QPSK\_1RB#0**

| Frequency (MHz) | Ps (dBm) | P <sub>cl</sub> (dB) | Diatance | G <sub>a</sub> Antenna Gain(dB) | Peak EIRP (dBm) | Limit (dBm) | Margin (dB) | Polarization |
|-----------------|----------|----------------------|----------|---------------------------------|-----------------|-------------|-------------|--------------|
| 5305.0          | -42.26   | 4.45                 | 3.00     | 12.45                           | -34.26          | -25.00      | 9.26        | H            |
| 7957.5          | -52.8    | 5.47                 | 3.00     | 13.66                           | -44.61          | -25.00      | 19.61       | H            |
| 5305.0          | -43.5    | 4.45                 | 3.00     | 12.45                           | -35.5           | -25.00      | 10.5        | V            |
| 7957.5          | -52.86   | 5.48                 | 3.00     | 13.66                           | -44.68          | -25.00      | 19.68       | V            |

**LTE Band 41\_Channel Bandwidth 10MHz\_QPSK\_1RB#0**

| Frequency (MHz) | Ps (dBm) | P <sub>cl</sub> (dB) | Diatance | G <sub>a</sub> Antenna Gain(dB) | Peak EIRP (dBm) | Limit (dBm) | Margin (dB) | Polarization |
|-----------------|----------|----------------------|----------|---------------------------------|-----------------|-------------|-------------|--------------|
| 5300.0          | -41.86   | 4.45                 | 3.00     | 12.45                           | -33.86          | -25.00      | 8.86        | H            |
| 7950.0          | -53.48   | 5.47                 | 3.00     | 13.66                           | -45.29          | -25.00      | 20.29       | H            |
| 5300.0          | -43.04   | 4.45                 | 3.00     | 12.45                           | -35.04          | -25.00      | 10.04       | V            |
| 7950.0          | -53.06   | 5.48                 | 3.00     | 13.66                           | -44.88          | -25.00      | 19.88       | V            |

**LTE Band 41\_Channel Bandwidth 15MHz\_QPSK\_1RB#0**

| Frequency (MHz) | Ps (dBm) | P <sub>cl</sub> (dB) | Diatance | G <sub>a</sub> Antenna Gain(dB) | Peak EIRP (dBm) | Limit (dBm) | Margin (dB) | Polarization |
|-----------------|----------|----------------------|----------|---------------------------------|-----------------|-------------|-------------|--------------|
| 5295.0          | -43.76   | 4.45                 | 3.00     | 12.45                           | -35.76          | -25.00      | 10.76       | H            |
| 7942.5          | -53.16   | 5.47                 | 3.00     | 13.66                           | -44.97          | -25.00      | 19.97       | H            |
| 5295.0          | -43.07   | 4.45                 | 3.00     | 12.45                           | -35.07          | -25.00      | 10.07       | V            |
| 7942.5          | -53.07   | 5.48                 | 3.00     | 13.66                           | -44.89          | -25.00      | 19.89       | V            |

**LTE Band 41\_Channel Bandwidth 20MHz\_QPSK\_1RB#0**

| Frequency (MHz) | Ps (dBm) | P <sub>cl</sub> (dB) | Diatance | G <sub>a</sub> Antenna Gain(dB) | Peak EIRP (dBm) | Limit (dBm) | Margin (dB) | Polarization |
|-----------------|----------|----------------------|----------|---------------------------------|-----------------|-------------|-------------|--------------|
| 5290.0          | -41.18   | 4.45                 | 3.00     | 12.45                           | -33.18          | -25.00      | 8.18        | H            |
| 7935.0          | -52.55   | 5.47                 | 3.00     | 13.66                           | -44.36          | -25.00      | 19.36       | H            |
| 5290.0          | -44.94   | 4.45                 | 3.00     | 12.45                           | -36.94          | -25.00      | 11.94       | V            |
| 7935.0          | -51.06   | 5.48                 | 3.00     | 13.66                           | -42.88          | -25.00      | 17.88       | V            |

**LTE Band 41\_Channel Bandwidth 5MHz\_16QAM\_1RB#0**

| Frequency (MHz) | Ps (dBm) | P <sub>cl</sub> (dB) | Diatance | G <sub>a</sub> Antenna Gain(dB) | Peak EIRP (dBm) | Limit (dBm) | Margin (dB) | Polarization |
|-----------------|----------|----------------------|----------|---------------------------------|-----------------|-------------|-------------|--------------|
| 5305.0          | -41.3    | 4.45                 | 3.00     | 12.45                           | -33.3           | -25.00      | 8.3         | H            |
| 7957.5          | -52.02   | 5.47                 | 3.00     | 13.66                           | -43.83          | -25.00      | 18.83       | H            |
| 5305.0          | -44.41   | 4.45                 | 3.00     | 12.45                           | -36.41          | -25.00      | 11.41       | V            |
| 7957.5          | -53.39   | 5.48                 | 3.00     | 13.66                           | -45.21          | -25.00      | 20.21       | V            |

**LTE Band 41\_Channel Bandwidth 10MHz\_16QAM\_1RB#0**

| Frequency (MHz) | Ps (dBm) | P <sub>cl</sub> (dB) | Diatance | G <sub>a</sub> Antenna Gain(dB) | Peak EIRP (dBm) | Limit (dBm) | Margin (dB) | Polarization |
|-----------------|----------|----------------------|----------|---------------------------------|-----------------|-------------|-------------|--------------|
| 5300.0          | -42.99   | 4.45                 | 3.00     | 12.45                           | -34.99          | -25.00      | 9.99        | H            |
| 7950.0          | -51.91   | 5.47                 | 3.00     | 13.66                           | -43.72          | -25.00      | 18.72       | H            |
| 5300.0          | -42.75   | 4.45                 | 3.00     | 12.45                           | -34.75          | -25.00      | 9.75        | V            |
| 7950.0          | -51.87   | 5.48                 | 3.00     | 13.66                           | -43.69          | -25.00      | 18.69       | V            |

**LTE Band 41\_Channel Bandwidth 15MHz\_16QAM\_1RB#0**

| Frequency (MHz) | Ps (dBm) | P <sub>cl</sub> (dB) | Diatance | G <sub>a</sub> Antenna Gain(dB) | Peak EIRP (dBm) | Limit (dBm) | Margin (dB) | Polarization |
|-----------------|----------|----------------------|----------|---------------------------------|-----------------|-------------|-------------|--------------|
| 5295.0          | -42.02   | 4.45                 | 3.00     | 12.45                           | -34.02          | -25.00      | 9.02        | H            |
| 7942.5          | -53.82   | 5.47                 | 3.00     | 13.66                           | -45.63          | -25.00      | 20.63       | H            |
| 5295.0          | -42.91   | 4.45                 | 3.00     | 12.45                           | -34.91          | -25.00      | 9.91        | V            |
| 7942.5          | -52.29   | 5.48                 | 3.00     | 13.66                           | -44.11          | -25.00      | 19.11       | V            |

**LTE Band 41\_Channel Bandwidth 20MHz\_16QAM\_1RB#0**

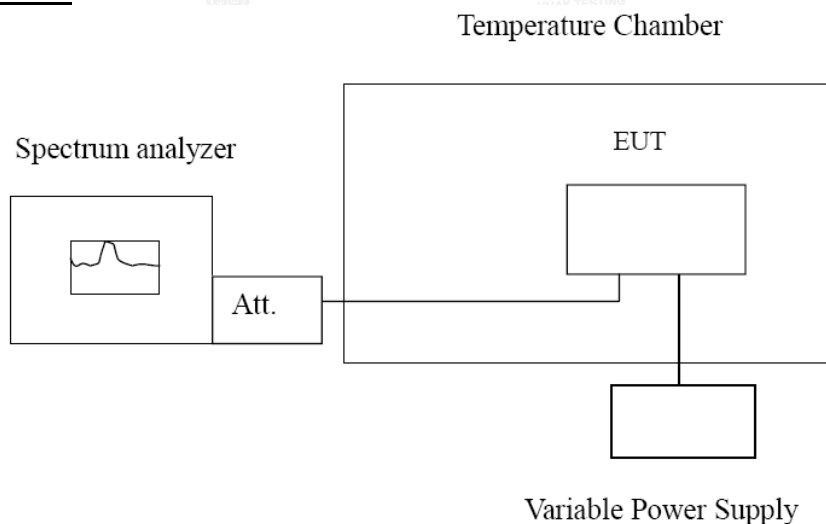
| Frequency (MHz) | Ps (dBm) | P <sub>cl</sub> (dB) | Diatance | G <sub>a</sub> Antenna Gain(dB) | Peak EIRP (dBm) | Limit (dBm) | Margin (dB) | Polarization |
|-----------------|----------|----------------------|----------|---------------------------------|-----------------|-------------|-------------|--------------|
| 5290.0          | -42.06   | 4.45                 | 3.00     | 12.45                           | -34.06          | -25.00      | 9.06        | H            |
| 7935.0          | -54.18   | 5.47                 | 3.00     | 13.66                           | -45.99          | -25.00      | 20.99       | H            |
| 5290.0          | -44.01   | 4.45                 | 3.00     | 12.45                           | -36.01          | -25.00      | 11.01       | V            |
| 7935.0          | -51.27   | 5.48                 | 3.00     | 13.66                           | -43.09          | -25.00      | 18.09       | V            |

## 4.7 Frequency Stability

### LIMIT

According to §2.1055 requirement, the frequency stability shall be sufficient to ensure that the fundamental emissions stay within the authorized bands of operation and should not exceed 2.5ppm.

### TEST CONFIGURATION



### TEST PROCEDURE

The EUT was setup according to EIA/TIA 603D

#### **Frequency Stability Under Temperature Variations:**

In order to measure the carrier frequency under the condition of AFC lock, it is necessary to make measurements with the EUT in a "call mode". This is accomplished with the use of R&S CMW500 DIGITAL RADIO COMMUNICATION TESTER.

1. Measure the carrier frequency at room temperature.
2. Subject the EUT to overnight soak at -30°C.
3. With the EUT, powered via nominal voltage, connected to the CMW500 and in a simulated call on middle channel for LTE band 41, measure the carrier frequency. These measurements should be made within 2 minutes of Powering up the EUT, to prevent significant self-warming.
4. Repeat the above measurements at 10°C increments from -30°C to +50°C. Allow at least 1.5 hours at each temperature, unpowered, before making measurements.
5. Re-measure carrier frequency at room temperature with nominal voltage. Vary supply voltage from minimum voltage to maximum voltage, in 0.1Volt increments re-measuring carrier frequency at each voltage. Pause at nominal voltage for 1.5 hours unpowered, to allow any self-heating to stabilize, before continuing.
6. Subject the EUT to overnight soak at +50°C.
7. With the EUT, powered via nominal voltage, connected to the CMW500 and in a simulated call on the centre channel, measure the carrier frequency. These measurements should be made within 2 minutes of Powering up the EUT, to prevent significant self-warming.
8. Repeat the above measurements at 10 °C increments from +50°C to -30°C. Allow at least 1.5 hours at each temperature, unpowered, before making measurements
9. At all temperature levels hold the temperature to +/- 0.5°C during the measurement procedure.

#### **Frequency Stability Under Voltage Variations:**

Set chamber temperature to 20°C. Use a variable AC power supply / DC power source to power the EUT and set the voltage to rated voltage. Set the spectrum analyzer RBW low enough to obtain the desired frequency resolution and recorded the frequency.

Reduce the input voltage to specify extreme voltage variation ( $\pm 15\%$ ) and endpoint, record the maximum frequency change.

### TEST RESULTS

Remark:

1. We tested all RB Configuration refer 3GPP TS136 521 for each Channel Bandwidth of LTE Band 41; recorded worst case.

LTE Band 41\_5MHz bandwidth\_QPSK\_1RB#0 (worst case of all bandwidths)

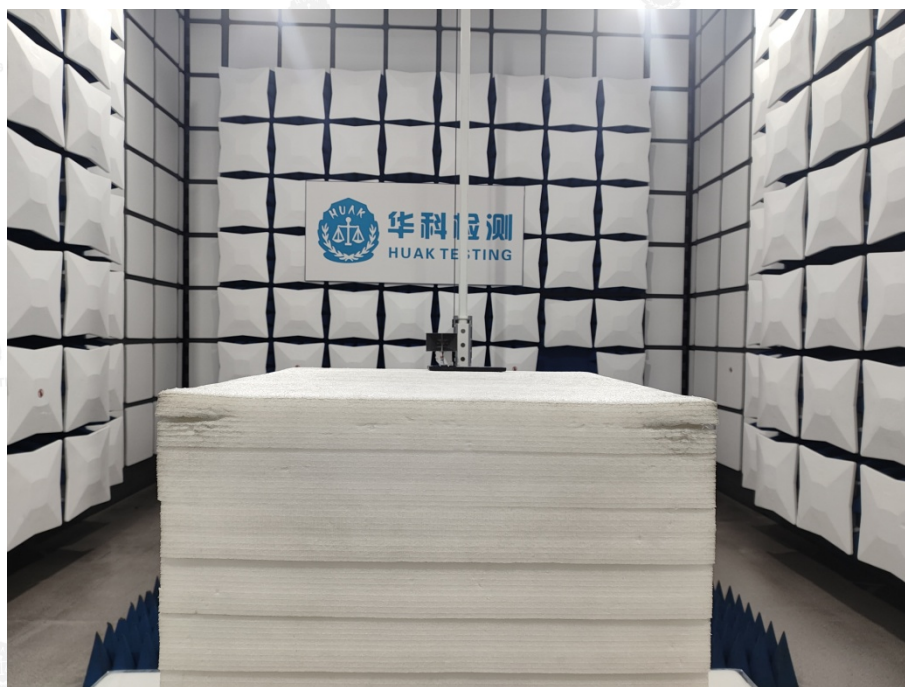
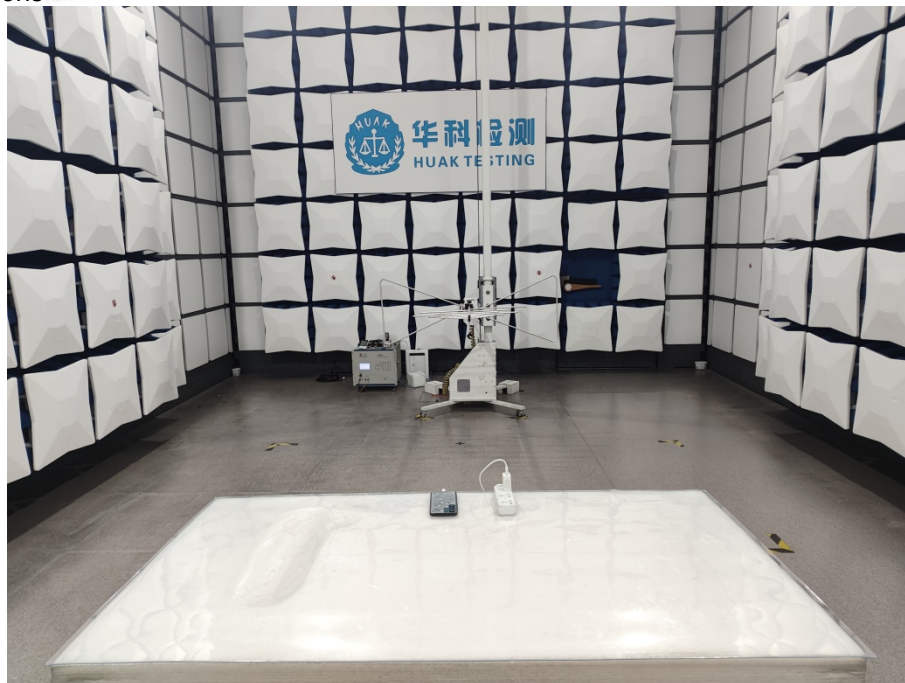
| LTE Band 41 |                  |                     |                      |             |         |
|-------------|------------------|---------------------|----------------------|-------------|---------|
| DC Power    | Temperature (°C) | Frequency error(Hz) | Frequency error(ppm) | Limit (ppm) | Verdict |
| 4.25        | 20               | -14.02              | -0.005525            | 2.50        | PASS    |
| 5.0         | 20               | -6.59               | -0.002597            | 2.50        | PASS    |
| 5.75        | 20               | -12.47              | -0.004914            | 2.50        | PASS    |
| 5.0         | -30              | -8.57               | -0.003377            | 2.50        | PASS    |
| 5.0         | -20              | -8.45               | -0.003330            | 2.50        | PASS    |
| 5.0         | -10              | -15.28              | -0.006022            | 2.50        | PASS    |
| 5.0         | 0                | -12.79              | -0.005040            | 2.50        | PASS    |
| 5.0         | 10               | -12.19              | -0.004804            | 2.50        | PASS    |
| 5.0         | 20               | -10.23              | -0.004032            | 2.50        | PASS    |
| 5.0         | 30               | -12.32              | -0.004757            | 2.50        | PASS    |
| 5.0         | 40               | 4.46                | 0.001722             | 2.50        | PASS    |
| 5.0         | 50               | 3.85                | 0.001486             | 2.50        | PASS    |

LTE Band 41\_5MHz bandwidth\_16QAM\_1RB#0 (worst case of all bandwidths)

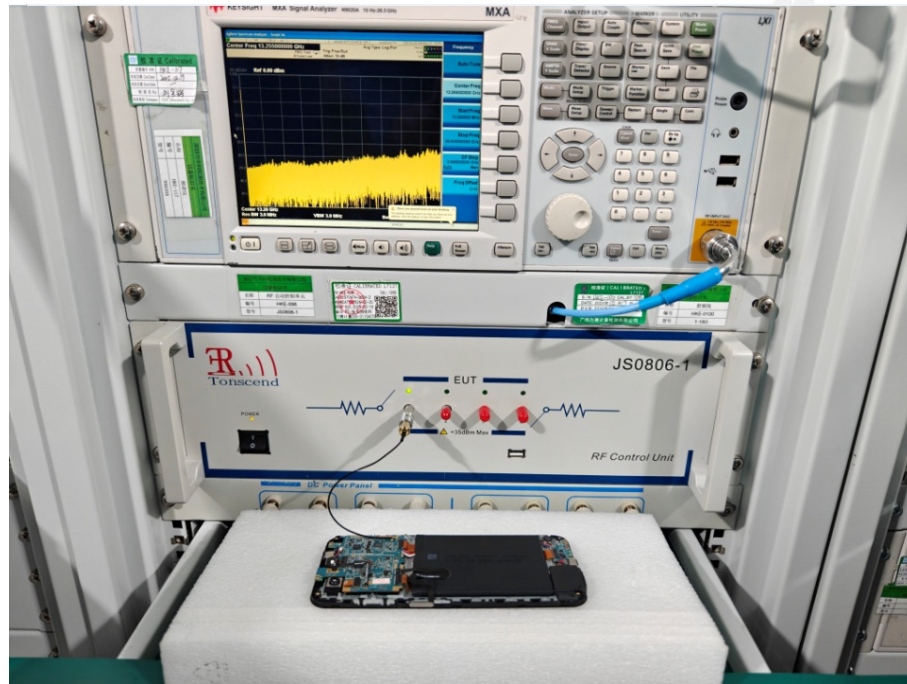
| LTE Band 41 |                  |                     |                      |             |         |
|-------------|------------------|---------------------|----------------------|-------------|---------|
| DC Power    | Temperature (°C) | Frequency error(Hz) | Frequency error(ppm) | Limit (ppm) | Verdict |
| 4.25        | 20               | 3.68                | 0.001450             | 2.50        | PASS    |
| 5.0         | 20               | -6.41               | -0.002526            | 2.50        | PASS    |
| 5.75        | 20               | -3.35               | -0.001320            | 2.50        | PASS    |
| 5.0         | -30              | -15.48              | -0.006100            | 2.50        | PASS    |
| 5.0         | -20              | -15.03              | -0.005923            | 2.50        | PASS    |
| 5.0         | -10              | -8.54               | -0.003366            | 2.50        | PASS    |
| 5.0         | 0                | -7.67               | -0.003023            | 2.50        | PASS    |
| 5.0         | 10               | -12.69              | -0.005001            | 2.50        | PASS    |
| 5.0         | 20               | -13.28              | -0.005233            | 2.50        | PASS    |
| 5.0         | 30               | 6.78                | 0.002618             | 2.50        | PASS    |
| 5.0         | 40               | -6.08               | -0.002347            | 2.50        | PASS    |
| 5.0         | 50               | 5.58                | 0.002154             | 2.50        | PASS    |

## 5 Test Setup Photos of the EUT

Test Model No.: S25 Ultra  
Radiated Emissions



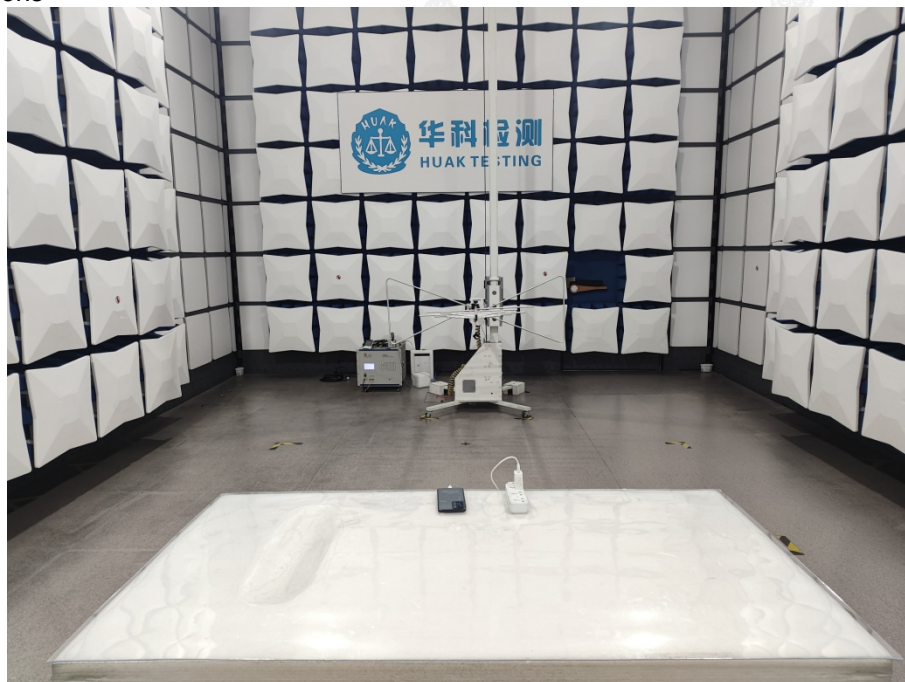
### RF Conducted Emission



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Series Model No.: R12 pro  
Radiated Emissions



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