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Report Template Version: V03 Report Template Revision Date: Mar.1st, 2017

NE 60. 17

Test Report

| Report No. : | CQASZ20211001751E-01 | | |
|-------------------------|---|--|--|
| Applicant: | Dongguan Hele Electronics Co.,Ltd | | |
| Address of Applicant: | Dalingya Industrial Zone,Daojiao Town,Dongguan City,Guangdong,China | | |
| Equipment Under Test (E | UT): | | |
| Product: | QCY-T17S | | |
| All Model No.: | BH21Q17B | | |
| Test Model No.: | BH21Q17B | | |
| Brand Name: | N/A | | |
| FCC ID: | RDR-BH21Q17BL | | |
| Standards: | 47 CFR Part 15, Subpart C | | |
| Date of Receipt: | 2021-10-12 | | |
| Date of Test: | 2021-10-12 to 2021-10-27 | | |
| Date of Issue: | 2021-11-03 | | |
| Test Result : | PASS* | | |

|) | |
|---------------|------------|
| | TESTING TO |
| Huonz ang) | |
| | APPROVED * |
| | |

 * In the configuration tested, the EUT complied with the standards specified above.

The test report is effective only with both signature and specialized stamp, The result(s) shown in this report refer only to the sample(s) tested. Without written approval of CQA, this report can't be reproduced except in full.





Revision History Of Report

| Report No. | Version | Description | Issue Date |
|----------------------|---------|----------------|------------|
| CQASZ20211001751E-01 | Rev.01 | Initial report | 2021-11-03 |



1 Test Summary

| Test Item | Test Requirement | Test method | Result |
|---|---|--------------------|--------|
| Antenna Requirement | 47 CFR Part 15, Subpart C Section 15.203/15.247 (c) | ANSI C63.10 (2013) | PASS |
| AC Power Line Conducted Emission | 47 CFR Part 15, Subpart C Section 15.207 | ANSI C63.10 (2013) | PASS |
| Conducted Peak Output Power | 47 CFR Part 15, Subpart C Section 15.247 (b)(1) | ANSI C63.10 (2013) | PASS |
| 20dB Occupied Bandwidth | 47 CFR Part 15, Subpart C Section 15.247 (a)(1) | ANSI C63.10 (2013) | PASS |
| Carrier Frequencies Separation | 47 CFR Part 15, Subpart C Section 15.247 (a)(1) | ANSI C63.10 (2013) | PASS |
| Hopping Channel Number | 47 CFR Part 15, Subpart C Section 15.247 (a)(1) | ANSI C63.10 (2013) | PASS |
| Dwell Time | 47 CFR Part 15, Subpart C Section 15.247 (a)(1) | ANSI C63.10 (2013) | PASS |
| Pseudorandom Frequency Hopping Sequence | 47 CFR Part 15, Subpart C Section 15.247(b)(4)&TCB Exclusion List (7 July 2002) | ANSI C63.10 (2013) | PASS |
| Band-edge for RF Conducted Emissions | 47 CFR Part 15, Subpart C Section 15.247(d) | ANSI C63.10 (2013) | PASS |
| RF Conducted Spurious Emissions | 47 CFR Part 15, Subpart C Section 15.247(d) | ANSI C63.10 (2013) | PASS |
| Radiated Spurious emissions | 47 CFR Part 15, Subpart C Section 15.205/15.209 | ANSI C63.10 (2013) | PASS |
| Restricted bands around fundamental frequency (Radiated Emission) | 47 CFR Part 15, Subpart C Section 15.205/15.209 | ANSI C63.10 (2013) | PASS |



2 Contents

Page

| 1 TEST SUMMARY | |
|--|----|
| 2 CONTENTS | 4 |
| 3 GENERAL INFORMATION | |
| 3.1 CLIENT INFORMATION | |
| 3.2 GENERAL DESCRIPTION OF EUT | |
| 3.3 Additional Instructions | |
| 3.4 Test Environment | |
| 3.5 DESCRIPTION OF SUPPORT UNITS | |
| 3.6 STATEMENT OF THE MEASUREMENT UNCERTAINTY | |
| 3.7 TEST LOCATION | |
| 3.8 TEST FACILITY | |
| 3.9 ABNORMALITIES FROM STANDARD CONDITIONS | |
| 3.10 OTHER INFORMATION REQUESTED BY THE CUSTOMER | |
| 3.11 Equipment List | |
| 4 TEST RESULTS AND MEASUREMENT DATA | 12 |
| 4.1 ANTENNA REQUIREMENT | |
| 4.2 Conducted Emissions | - |
| 4.3 Conducted Peak Output Power | |
| 4.4 20DB OCCUPY BANDWIDTH | |
| 4.5 CARRIER FREQUENCIES SEPARATION | |
| 4.6 Hopping Channel Number | |
| 4.7 Dwell Time | |
| 4.8 BAND-EDGE FOR RF CONDUCTED EMISSIONS | |
| 4.9 Spurious RF Conducted Emissions | |
| 4.10 OTHER REQUIREMENTS FREQUENCY HOPPING SPREAD SPECTRUM SYSTEM | |
| 4.11 RADIATED SPURIOUS EMISSION & RESTRICTED BANDS | |
| 4.11.1 Radiated Emission below 1GHz | |
| 4.11.2 Transmitter Emission above 1GHz | |
| 5 PHOTOGRAPHS - EUT TEST SETUP | 91 |
| 5.1 RADIATED EMISSION | |
| 5.2 Conducted Emission | |
| 6 PHOTOGRAPHS - EUT CONSTRUCTIONAL DETAILS | 93 |



3 General Information

3.1 Client Information

| Applicant: | Dongguan Hele Electronics Co.,Ltd | | |
|--------------------------|---|--|--|
| Address of Applicant: | Dalingya Industrial Zone,Daojiao Town,Dongguan City,Guangdong,China | | |
| Manufacturer: | Dongguan Hele Electronics Co.,Ltd | | |
| Address of Manufacturer: | Dalingya Industrial Zone,Daojiao Town,Dongguan City,Guangdong,China | | |
| Factory: | Dongguan Hele Electronics Co.,Ltd | | |
| Address of Factory: | Dalingya Industrial Zone,Daojiao Town,Dongguan City,Guangdong,China | | |

3.2 General Description of EUT

| Product Name: | QCY-T17S | | |
|-----------------------|---|--|--|
| All Model No.: | BH21Q17B | | |
| Test Model No.: | BH21Q17B | | |
| Trade Mark: | N/A | | |
| Hardware Version: | V5.2 | | |
| Software Version: | V5.2 | | |
| Operation Frequency: | 2402MHz~2480MHz | | |
| Bluetooth Version: | BT5.2 | | |
| Modulation Technique: | Frequency Hopping Spread Spectrum(FHSS) | | |
| Modulation Type: | GFSK, π/4DQPSK, 8DPSK | | |
| Transfer Rate: | 1Mbps/2Mbps/3Mbps | | |
| Number of Channel: | 79 | | |
| Hopping Channel Type: | Adaptive Frequency Hopping systems | | |
| Product Type: | Mobile Portable Fix Location | | |
| Test Software of EUT: | Signaling fixed frequency | | |
| Antenna Type: | FPC antenna | | |
| Antenna Gain: | -1.16 dBi | | |
| Power Supply: | Li-ion battery: DC 3.7V , Charge by DC 5V | | |

Note:

BT does not work when EUT is charging



| Operation Frequency each of channel | | | | | | | |
|-------------------------------------|-----------|---------|-----------|---------|-----------|---------|-----------|
| Channel | Frequency | Channel | Frequency | Channel | Frequency | Channel | Frequency |
| 0 | 2402MHz | 20 | 2422MHz | 40 | 2442MHz | 60 | 2462MHz |
| 1 | 2403MHz | 21 | 2423MHz | 41 | 2443MHz | 61 | 2463MHz |
| 2 | 2404MHz | 22 | 2424MHz | 42 | 2444MHz | 62 | 2464MHz |
| 3 | 2405MHz | 23 | 2425MHz | 43 | 2445MHz | 63 | 2465MHz |
| 4 | 2406MHz | 24 | 2426MHz | 44 | 2446MHz | 64 | 2466MHz |
| 5 | 2407MHz | 25 | 2427MHz | 45 | 2447MHz | 65 | 2467MHz |
| 6 | 2408MHz | 26 | 2428MHz | 46 | 2448MHz | 66 | 2468MHz |
| 7 | 2409MHz | 27 | 2429MHz | 47 | 2449MHz | 67 | 2469MHz |
| 8 | 2410MHz | 28 | 2430MHz | 48 | 2450MHz | 68 | 2470MHz |
| 9 | 2411MHz | 29 | 2431MHz | 49 | 2451MHz | 69 | 2471MHz |
| 10 | 2412MHz | 30 | 2432MHz | 50 | 2452MHz | 70 | 2472MHz |
| 11 | 2413MHz | 31 | 2433MHz | 51 | 2453MHz | 71 | 2473MHz |
| 12 | 2414MHz | 32 | 2434MHz | 52 | 2454MHz | 72 | 2474MHz |
| 13 | 2415MHz | 33 | 2435MHz | 53 | 2455MHz | 73 | 2475MHz |
| 14 | 2416MHz | 34 | 2436MHz | 54 | 2456MHz | 74 | 2476MHz |
| 15 | 2417MHz | 35 | 2437MHz | 55 | 2457MHz | 75 | 2477MHz |
| 16 | 2418MHz | 36 | 2438MHz | 56 | 2458MHz | 76 | 2478MHz |
| 17 | 2419MHz | 37 | 2439MHz | 57 | 2459MHz | 77 | 2479MHz |
| 18 | 2420MHz | 38 | 2440MHz | 58 | 2460MHz | 78 | 2480MHz |
| 19 | 2421MHz | 39 | 2441MHz | 59 | 2461MHz | | |

Note:

In section 15.31(m), regards to the operating frequency range over 10 MHz, the Lowest frequency, the middle frequency, and the highest frequency of channel were selected to perform the test, and the selected channel see below:

| Channel | Frequency |
|---------------------|-----------|
| The Lowest channel | 2402MHz |
| The Middle channel | 2441MHz |
| The Highest channel | 2480MHz |



3.3 Additional Instructions

| EUT Test Software Settings: | | | | | |
|---|---|----------------|--|--|--|
| Mode: | Special software is used. Through engineering command into the engineering mode. engineering command: *#*#3646633#*#* | | | | |
| EUT Power level: | Class2 (Power level is built-in set parameters and cannot be changed and selected) | | | | |
| Use test software to set the lot transmitting of the EUT. | Use test software to set the lowest frequency, the middle frequency and the highest frequency keep transmitting of the EUT. | | | | |
| Mode | Channel | Frequency(MHz) | | | |
| | СНО | 2402 | | | |
| DH1/DH3/DH5 | СН39 | 2441 | | | |
| | CH78 | 2480 | | | |
| | СНО | 2402 | | | |
| 2DH1/2DH3/2DH5 | CH39 | 2441 | | | |
| | CH78 | 2480 | | | |
| | СНО | 2402 | | | |
| 3DH1/3DH3/3DH5 | СН39 | 2441 | | | |
| | CH78 | 2480 | | | |

Run Software:

| Test Connands | - | Test Arguments - | | | |
|------------------------|-----------|---------------------|---------------------|----|---------|
| CV IX CONTINUOUS IX | ^ | Channel 1 (0-78) | 39 | ^ | Close |
| PACEET TX PACEET BX | - | Channel 2 (0-78) | 39 | | Help |
| QHS RF TEST STOP | | Channel 3 (0-78) | 39 | | Execute |
| POWER TABLE GET | | Channel 4 (0-78) | 39 | | |
| FOWER TABLE SET | 4 | Channel 5 (0-78) | 39 | | Reset |
| ENABLE DUT MODE | Ť | Payload | Pseudo-random - | | |
| C:\Users\Administ | rator\App | Bata\Local\QTIL\Blu | eTest3\testapplog.t | xt | |
| pening USB IRB (| | | eTest3\testapplog.t | xt | |



3.4 Test Environment

| Operating Environment | Operating Environment: | | |
|-----------------------|---|--|--|
| Temperature: | 26 °C | | |
| Humidity: | 57 % RH | | |
| Atmospheric Pressure: | 100.9mbar | | |
| Test Mode: | Use test software to set the lowest frequency, the middle frequency and the highest frequency keep transmitting of the EUT. | | |

3.5 Description of Support Units

The EUT has been tested with associated equipment below.

| Description | Manufacturer | Model No. | Remark | FCC certification |
|-------------|--------------|-----------|--------|-------------------|
| / | / | / | / | / |



3.6 Statement of the measurement uncertainty

The data and results referenced in this document are true and accurate.

The reader is cautioned that there may be errors within the calibration limits of the equipment and facilities.

The measurement uncertainty was calculated for all measurements listed in this test report acc. to CISPR 16 - 4 "Specification for radio disturbance and immunity measuring apparatus and methods – Part 4: Uncertainty in EMC Measurements" and is documented in the **Shenzhen Huaxia Testing Technology Co., Ltd.** quality system acc. to DIN EN ISO/IEC 17025.

Furthermore, component and process variability of devices similar to that tested may result in additional deviation. The manufacturer has the sole responsibility of continued compliance of the device.

| No. | Item | Uncertainty | Notes |
|-----|------------------------------------|--------------------|-------|
| 1 | Radiated Emission (Below 1GHz) | ±5.12dB | (1) |
| 2 | Radiated Emission (Above 1GHz) | ±4.60dB | (1) |
| 3 | Conducted Disturbance (0.15~30MHz) | ±3.34dB | (1) |
| 4 | Radio Frequency | 3×10 ⁻⁸ | (1) |
| 5 | Duty cycle | 0.6 %. | (1) |
| 6 | Occupied Bandwidth | 1.1% | (1) |
| 7 | RF conducted power | 0.86dB | (1) |
| 8 | RF power density | 0.74 | (1) |
| 9 | Conducted Spurious emissions | 0.86dB | (1) |
| 10 | Temperature test | 0.8°C | (1) |
| 11 | Humidity test | 2.0% | (1) |
| 12 | Supply voltages | 0.5 %. | (1) |
| 13 | time | 0.6 %. | (1) |
| 14 | Frequency Error | 5.5 Hz | (1) |

Hereafter the best measurement capability for CQA laboratory is reported:

(1)This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of k=2.



3.7 Test Location

Shenzhen Huaxia Testing Technology Co., Ltd,

1F., Block A of Tongsheng Technology Building, Huahui Road, Dalang Street, Longhua District, Shenzhen, China

3.8 Test Facility

The test facility is recognized, certified, or accredited by the following organizations: **IC Registration No.: 22984-1**

The 3m Semi-anechoic chamber of Shenzhen Huaxia Testing Technology Co., Ltd. has been registered by Certification and Engineering Bureau of Industry Canada for radio equipment testing

• A2LA (Certificate No. 4742.01)

Shenzhen Huaxia Testing Technology Co., Ltd., Shenzhen EMC Laboratory is accredited by the

American Association for Laboratory Accreditation(A2LA). Certificate No. 4742.01.

• FCC Registration No.: 522263

Shenzhen Huaxia Testing Technology Co., Ltd., Shenzhen EMC Laboratory has been registered and fully described in a report filed with the (FCC) Federal Communications Commission. The acceptance letter from the FCC is maintained in our files. Registration No.:522263

3.9 Abnormalities from Standard Conditions

None.

3.10Other Information Requested by the Customer

None.



3.11 Equipment List

| Test Equipment | Manufacturer | Model No. | Instrument No. | Calibration Date | Calibration Due Date |
|-------------------------------|--------------|----------------------------|-------------------|---------------------|-------------------------|
| EMI Test Receiver | R&S | ESR7 | CQA-005 | 2021/9/10 | 2022/9/9 |
| Spectrum analyzer | R&S | FSU26 | CQA-038 | 2021/9/10 | 2022/9/9 |
| Preamplifier | MITEQ | AFS4-00010300-18-10P- 4 | CQA-035 | 2021/9/10 | 2022/9/9 |
| Preamplifier | MITEQ | AMF-6D-02001800-29- 20P | CQA-036 | 2021/9/10 | 2022/9/9 |
| Loop antenna | Schwarzbeck | FMZB1516 | CQA-087 | 2021/9/16 | 2024/9/15 |
| Bilog Antenna | R&S | HL562 | CQA-011 | 2021/9/16 | 2024/9/15 |
| Horn Antenna | R&S | HF906 | CQA-012 | 2021/9/16 | 2024/9/15 |
| Horn Antenna | Schwarzbeck | BBHA 9170 | CQA-088 | 2021/9/16 | 2024/9/15 |
| Coaxial Cable (Above 1GHz) | CQA | N/A | C019 | 2021/9/10 | 2022/9/9 |
| Coaxial Cable (Below 1GHz) | CQA | N/A | C020 | 2021/9/10 | 2022/9/9 |
| Antenna Connector | CQA | RFC-01 | CQA-080 | 2021/9/10 | 2022/9/9 |
| RF cable(9KHz~40GHz) | CQA | RF-01 | CQA-079 | 2021/9/10 | 2022/9/9 |
| Power divider | MIDWEST | PWD-2533-02-SMA-79 | CQA-067 | 2021/9/10 | 2022/9/9 |
| EMI Test Receiver | R&S | ESPI3 | CQA-013 | 2021/9/11 | 2024/9/10 |
| LISN | R&S | ENV216 | CQA-003 | 2021/9/10 | 2022/9/9 |
| Coaxial cable | CQA | N/A | CQA-C009 | 2021/9/10 | 2022/9/9 |



4 Test results and Measurement Data

4.1 Antenna Requirement

| Standard requirement: | 47 CFR Part 15C Section 15.203 /247(c) |
|-----------------------|--|
| | |

15.203 requirement:

An intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator, the manufacturer may design the unit so that a broken antenna can be replaced by the user, but the use of a standard antenna jack or electrical connector is prohibited.

15.247(b) (4) requirement:

The conducted output power limit specified in paragraph (b) of this section is based on the use of antennas with directional gains that do not exceed 6 dBi. Except as shown in paragraph (c) of this section, if transmitting antennas of directional gain greater than 6 dBi are used, the conducted output power from the intentional radiator shall be reduced below the stated values in paragraphs (b)(1), (b)(2), and (b)(3) of this section, as appropriate, by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

EUT Antenna:



The antenna is FPC antenna. The best case gain of the antenna is -1.16dBi.



4.2 Conducted Emissions

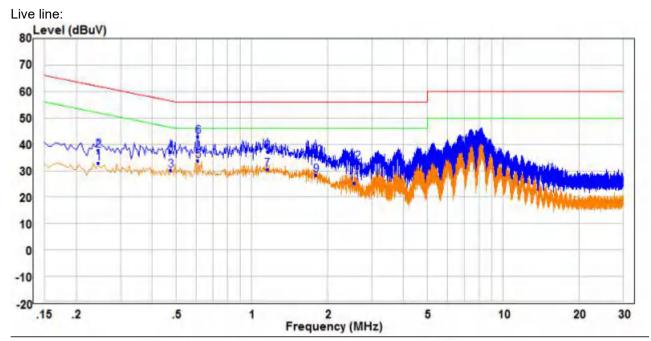
| | 5113 | | | |
|-----------------------|---|--|--|---|
| Test Requirement: | 47 CFR Part 15C Section 15.2 | 207 | | |
| Test Method: | ANSI C63.10: 2013 | | | |
| Test Frequency Range: | 150kHz to 30MHz | | | |
| Limit: | Frequency range (MHz) | Limit (c | lBuV) | |
| | | Quasi-peak | Average | |
| | 0.15-0.5 | 66 to 56* | 56 to 46* | |
| | 0.5-5 | 56 | 46 | |
| | 5-30 | 60 | 50 | |
| | * Decreases with the logarithn | | | |
| Test Procedure: | The mains terminal distur- room. The EUT was connected to Impedance Stabilization N- impedance. The power cal- connected to a second LIS reference plane in the sam measured. A multiple sock power cables to a single LI exceeded. The tabletop EUT was place ground reference plane. An placed on the horizontal gr The test was performed wi of the EUT shall be 0.4 m f vertical ground reference p reference plane. The LISN unit under test and bonded mounted on top of the grou between the closest points the EUT and associated ed In order to find the maximu equipment and all of the in ANSI C63.10: 2013 on con | b AC power source thro etwork) which provides bles of all other units of SN 2, which was bonde he way as the LISN 1 for set outlet strip was used ISN provided the rating ced upon a non-metalling of floor-standing ar round reference plane, th a vertical ground ref from the vertical ground ref from the vertical ground blane was bonded to the 1 was placed 0.8 m fro to a ground reference and reference plane. The s of the LISN 1 and the quipment was at least 0 im emission, the relative terface cables must be | bugh a LISN 1 (Line a $50\Omega/50\mu$ H + 5Ω line f the EUT were d to the ground or the unit being d to connect multiple g of the LISN was not c table 0.8m above the rangement, the EUT ference plane. The real d reference plane. The real d reference plane. The real d reference plane. The le horizontal ground om the boundary of the plane for LISNs his distance was EUT. All other units of 0.8 m from the LISN 2 | near ne was ar ne he of 2. |
| Test Setup: | Shielding Room | AE IIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII | Test Receiver | |



| Test Mode: | Charging mode |
|---------------|---------------|
| Test Voltage: | AC 120V/60Hz |
| Test Results: | Pass |



Measurement Data



| | Freq | Read Level | Factor | Level | Limit Line | Over Limit | Remark | Pol/Phase |
|-------------|-------|---------------|--------|-------|---------------|---------------|---------|-----------|
| - | MHz | dBuV | dB | dBuV | dBuV | dB | _ | |
| 1 | 0.245 | 23.34 | 9.49 | 32.83 | 51.92 | -19.09 | Average | Line |
| 1 2 3 | 0.245 | 28.22 | 9.49 | 37.71 | 61.92 | -24.21 | QP | Line |
| 3 | 0.475 | 20.72 | 9.52 | 30.24 | 46.43 | -16.19 | Average | Line |
| 4 | 0.475 | 27.75 | 9.52 | 37.27 | 56.43 | -19.16 | QP | Line |
| 5 PP | 0.610 | 24.00 | 9.72 | 33.72 | 46.00 | -12.28 | Average | Line |
| 6 QP | 0.610 | 33.36 | 9.72 | 43.08 | 56.00 | -12.92 | QP | Line |
| 7 | 1.155 | 20.80 | 9.53 | 30.33 | 46.00 | -15.67 | Average | Line |
| 8 | 1.155 | 27.78 | 9.53 | 37.31 | 56.00 | -18,69 | QP | Line |
| 9 | 1.800 | 18.80 | 9.53 | 28.33 | 46.00 | -17.67 | Average | Line |
| 10 | 1.800 | 25.90 | 9.53 | 35.43 | 56,00 | -20,57 | QP | Line |
| 11 | 2.555 | 15.57 | 9.58 | 25.15 | 46.00 | -20.85 | Average | Line |
| 12 | 2.555 | 23.47 | 9.58 | 33.05 | 56.00 | -22.95 | QP | Line |

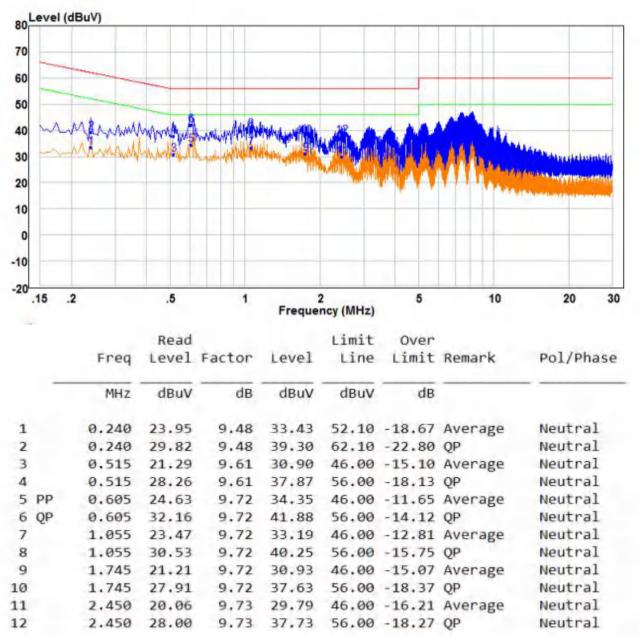
Remark:

1. The following Quasi-Peak and Average measurements were performed on the EUT:

- 2. Final Test Level =Receiver Reading + LISN Factor + Cable Loss.
- 3. If the Peak value under Average limit, the Average value is not recorded in the report.



Neutral line:



Remark:

- 1. The following Quasi-Peak and Average measurements were performed on the EUT:
- 2. Final Test Level =Receiver Reading + LISN Factor + Cable Loss.
- 3. If the Peak value under Average limit, the Average value is not recorded in the report.



4.3 Conducted Peak Output Power

| Test Requirement: | 47 CFR Part 15C Section 15.247 (b)(1) |
|------------------------|--|
| Test Method: | ANSI C63.10:2013 |
| Test Setup: | Spectrum Analyzer E.U.T Non-Conducted Table Ground Reference Plane Remark: Offset=Cable loss+ attenuation factor. |
| Limit: | 21dBm |
| Exploratory Test Mode: | Non-hopping transmitting with all kind of modulation and all kind of data type |
| Final Test Mode: | Through Pre-scan, find the DH5 of data type is the worst case of GFSK modulation type, 2-DH5 of data type is the worst case of π /4DQPSK modulation type, 3-DH5 of data type is the worst case of 8DPSK modulation type. Only the worst case is recorded in the report. |
| Test Results: | Pass |

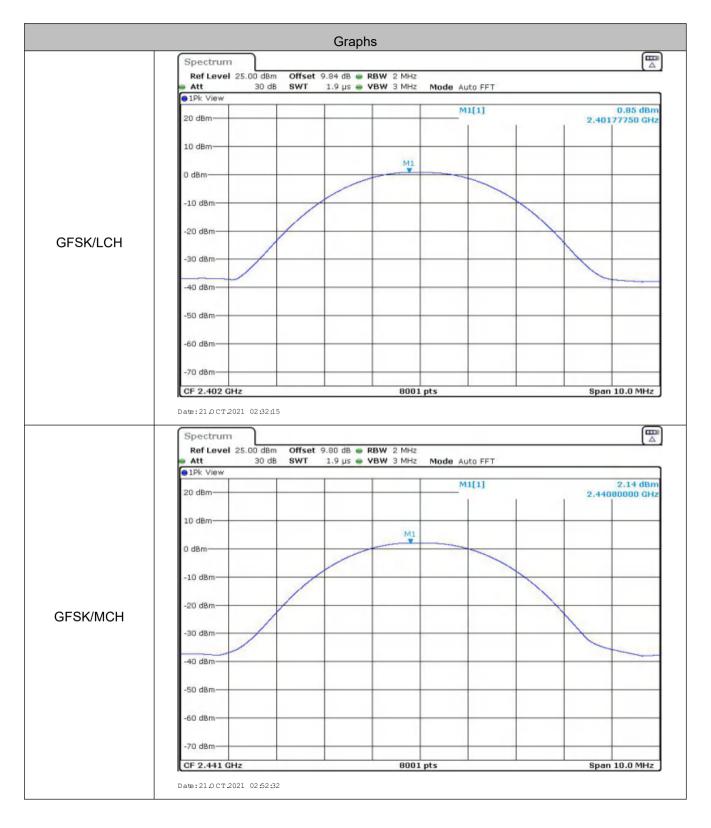


Measurement Data

| | GFSK mode | e | |
|--------------|-------------------------|-------------|--------|
| Test channel | Peak Output Power (dBm) | Limit (dBm) | Result |
| Lowest | 0.850 | 21.00 | Pass |
| Middle | 2.140 | 21.00 | Pass |
| Highest | 3.100 | 21.00 | Pass |
| | π/4DQPSK m | ode | |
| Test channel | Peak Output Power (dBm) | Limit (dBm) | Result |
| Lowest | 0.190 | 21.00 | Pass |
| Middle | 1.550 | 21.00 | Pass |
| Highest | 2.530 | 21.00 | Pass |
| | 8DPSK mod | le | |
| Test channel | Peak Output Power (dBm) | Limit (dBm) | Result |
| Lowest | 0.510 | 21.00 | Pass |
| Middle | 2.030 | 21.00 | Pass |
| Highest | 3.120 | 21.00 | Pass |



Test plot as follows:





| | Spectrum | | |
|--------------|---|--|----------------------------|
| | | RBW 2 MHz VBW 3 MHz Mode Auto FFT | |
| | 1Pk View 20 dBm | M1[1] | 3.10 dBm 2.47980880 GHz |
| | 10 dBm | | |
| | 0 dBm | M1 | |
| | -10 dBm | | |
| | -20 dBm | | |
| GFSK/HCH | -30 dBm | | |
| | -40 dBm | | |
| | -50 dBm | | |
| | -60 dBm | | |
| | -70 dBm | | |
| | A second s | | |
| | CF 2.48 GHz Date: 21.0 CT 2021 02:55:35 | 8001 pts | Span 10.0 MHz |
| | CF 2.48 GHz Date: 21.0 CT.2021 02:55:35 Spectrum Ref Level 25.00 dBm Offset 9.84 dB | | |
| | CF 2.48 GHz Date: 21.0 CT.2021 02:55:35 Spectrum Ref Level 25.00 dBm Offset 9.84 dB Att 30 dB SWT 1.9 µs | RBW 2 MHz | |
| | CF 2.48 GHz Date: 21.0 CT 2021 02:55:35 Spectrum Ref Level 25.00 dBm Offset 9.84 dB Att 30 dB SWT 1.9 µs 1Pk View | RBW 2 MHz VBW 3 MHz Mode Auto FFT | 0.19 dBm |
| | CF 2.48 GHz Date: 21.0 CT 2021 02:55:35 Spectrum Ref Level 25.00 dBm Offset 9.84 dB Att 30 dB SWT 1.9 µs 1Pk View 20 dBm | RBW 2 MHz VBW 3 MHz Mode Auto FFT | 0.19 dBm |
| | CF 2.48 GHz Date: 21.0 CT.2021 02:55:35 Spectrum Ref Level 25.00 dBm Offset 9.84 dB Att 30 dB SWT 1.9 μs • 1Pk View 20 dBm 10 dBm 10 dBm 10 dBm | RBW 2 MHz VBW 3 MHz Mode Auto FFT M1[1] | 0.19 dBm |
| | CF 2.48 GHz Date: 21.0 CT.2021 02:55:35 Spectrum Ref Level 25.00 dBm Offset 9.84 dB Att 30 dB SWT 1.9 µs ● 1Pk View 20 dBm 10 dBm 0 dBm | RBW 2 MHz VBW 3 MHz Mode Auto FFT M1[1] | 0.19 dBm |
| τ/4DQPSK/LCH | CF 2.48 GHz Date: 21.0 CT.2021 02:55:35 Spectrum Ref Level 25.00 dBm Offset 9.84 dB Att 30 dB SWT 1.9 µs 1Pk View 20 dBm 10 dBm 0 dBm -10 dBm -10 dBm | RBW 2 MHz VBW 3 MHz Mode Auto FFT M1[1] | 0.19 dBm |
| τ/4DQPSK/LCH | CF 2.48 GHz Date: 21.0 CT.2021 02:55:35 Spectrum Ref Level 25.00 dBm Offset 9.84 dB Att 30 dB SWT 1.9 µs 1Pk View 20 dBm 10 dBm 0 dBm -10 dBm | RBW 2 MHz VBW 3 MHz Mode Auto FFT M1[1] | 0.19 dBm |
| π/4DQPSK/LCH | CF 2.48 GHz Date: 21.0 CT.2021 02:55:35 Spectrum Ref Level 25.00 dBm Offset 9.84 dB Att 30 dB SWT 1.9 µs 1Pk View 20 dBm 10 dBm 0 dBm -10 dBm | RBW 2 MHz VBW 3 MHz Mode Auto FFT M1[1] | 0.19 dBm |
| π/4DQPSK/LCH | CF 2.48 GHz Date: 21.0 CT.2021 02:55:35 Spectrum Ref Level 25.00 dBm Offset 9.84 dB Att 30 dB SWT 1.9 µs 1Pk View 20 dBm 10 dBm 0 -10 dBm -10 dBm -30 dBm -40 dBm | RBW 2 MHz VBW 3 MHz Mode Auto FFT M1[1] | 0.19 dBm |
| π/4DQPSK/LCH | CF 2.48 GHz Date: 21.0 CT.2021 02:55:35 Spectrum Ref Level 25:00 dBm Offset 9.84 dB Att 30 dB SWT 1.9 µs 1Pk View 20 dBm 10 dBm 0 -10 dBm | RBW 2 MHz VBW 3 MHz Mode Auto FFT M1[1] | 0.19 dBm |



| | Spectrum | | |
|--------------|--|---|----------------------------|
| | Att 30 dB SWT 1.9 | dB 🖷 RBW 2 MHz us 🖶 VBW 3 MHz Mode Auto FFT | |
| | 1Pk View 20 dBm | M1[1] | 1.55 dBm 2.44069000 GHz |
| | 10 dBm | | |
| | 0 dBm | MI | |
| | -10 dBm | | |
| | -20 dBm | | |
| t/4DQPSK/MCH | -30 dBm | | |
| | -40 dBm | | |
| | -50 dBm | | |
| | -60 dBm | | |
| | -70 dBm | | |
| | | | |
| | | 8001 pts B B RBW 2 MHz | Span 10.0 MHz |
| | Date: 21.0 CT 2021 03:03:49 Spectrum Ref Level 25:00 dBm Offset 9:80 | d8 • RBW 2 MHz us • VBW 3 MHz Mode Auto FFT | |
| | Date: 21.0 CT 2021 03:03:49 Spectrum Ref Level 25:00 dBm Offset 9:80 Att 30 dB SWT 1.9 | dB 🖷 RBW 2 MHz | 2.53 dBm |
| | Date: 21.0 CT 2021 03.03:49 Spectrum Ref Level 25.00 dBm Offset 9.80 Att 30 dB SWT 1.9 1Pk View 20 dBm 10 dBm | d8 • RBW 2 MHz us • VBW 3 MHz Mode Auto FFT | 2.53 dBm |
| | Date: 21.0 CT 2021 03.03:49 | dB • RBW 2 MHz us • VBW 3 MHz Mode Auto FFT M1[1] | 2.53 dBm |
| | Date: 21.0 CT 2021 03.03:49 | dB • RBW 2 MHz us • VBW 3 MHz Mode Auto FFT M1[1] | 2.53 dBm |
| t/4DQPSK/HCH | Date: 21.0 CT 2021 03.03:49 | dB • RBW 2 MHz us • VBW 3 MHz Mode Auto FFT M1[1] | 2.53 dBm |
| 1/4DQPSK/HCH | Date: 21.0 CT 2021 03.03:49 | dB • RBW 2 MHz us • VBW 3 MHz Mode Auto FFT M1[1] | 2.53 dBm |
| 1/4DQPSK/HCH | Date: 21.0 CT 2021 03.03:49 | dB • RBW 2 MHz us • VBW 3 MHz Mode Auto FFT M1[1] | 2.53 dBm |
| τ/4DQPSK/HCH | Date: 21.0 CT.2021 03.03.49 | dB • RBW 2 MHz us • VBW 3 MHz Mode Auto FFT M1[1] | 2.53 dBm |
| τ/4DQPSK/HCH | Date: 21.0 CT.2021 03.03.49 | dB • RBW 2 MHz us • VBW 3 MHz Mode Auto FFT M1[1] | |



| | Spectrum | | | |
|-----------|--|---|---------------|---------------|
| | Att 30 dB SWT | : 9.84 dB | Mode Auto FFT | |
| | • 1Pk View | | M1[1] | 0.51 dBn |
| | 20 dBm- | | | 2.40185380 GH |
| | 10 dBm | | | |
| | 0 dBm | M1 | | |
| | | | | |
| | -10 dBm | | | |
| 8DPSK/LCH | -20 d8m | | | |
| ODPSK/LCH | -30 dBm | | | |
| | | | | |
| | -40 dBm | | | |
| | -50 dBm | | | |
| | -60 dBm | | | |
| | | | | |
| | -70 dBm- | | | |
| | | | | |
| | CF 2.402 GHz Date: 21 0 CT 2021 03:10:56 Spectrum Ref Level 25.00 dBm Offset | 8001 9.80 dB • RBW 2 MHz | pts | Span 10.0 MHz |
| | Date: 21 D CT 2021 03:10:56 Spectrum Ref Level 25.00 dBm Offset Att 30 dB SWT | | Mode Auto FFT | |
| | Date: 21.0 CT.2021 03:10:56 Spectrum Ref Level 25.00 dBm Offset Att 30 dB SWT 1Pk View | : 9.80 dB 🖷 RBW 2 MHz | | 2.03 dBn |
| | Date: 21 D CT 2021 03:10:56 Spectrum Ref Level 25.00 dBm Offset Att 30 dB SWT | : 9.80 dB 🖷 RBW 2 MHz | Mode Auto FFT | 2.03 dBn |
| | Date: 21.0 CT.2021 03:10:56 Spectrum Ref Level 25.00 dBm Offset Att 30 dB SWT 1Pk View | 9.80 dB ● RBW 2 MHz 1.9 μs ● VBW 3 MHz | Mode Auto FFT | 2.03 dBn |
| | Date: 21 O CT 2021 03:10:56 Spectrum Ref Level 25.00 dBm Offset Att 30 dB SWT 1Pk View 20 dBm | : 9.80 dB 👄 RBW 2 MHz | Mode Auto FFT | 2.03 dBn |
| | Date: 21.0 CT.2021 03:10:56 | 9.80 dB ● RBW 2 MHz 1.9 μs ● VBW 3 MHz | Mode Auto FFT | |
| | Date: 21.0 CT.2021 03:10:56 Spectrum Ref Level 25.00 dBm Offset Att 30 dB SWT IPk View 20 dBm 10 dBm | 9.80 dB ● RBW 2 MHz 1.9 μs ● VBW 3 MHz | Mode Auto FFT | 2.03 dBn |
| 8DPSK/MCH | Date: 21.0 CT.2021 03:10:56 | 9.80 dB ● RBW 2 MHz 1.9 μs ● VBW 3 MHz | Mode Auto FFT | 2.03 dBn |
| 8DPSK/MCH | Date: 21.0 CT.2021 03:10:56 Spectrum Ref Level 25.00 dBm Offset Att 30 dB SWT 10 dBm 0 dBm -10 dBm | 9.80 dB ● RBW 2 MHz 1.9 μs ● VBW 3 MHz | Mode Auto FFT | 2.03 dBn |
| 8DPSK/MCH | Date: 21.0 CT.2021 03:10:56 | 9.80 dB ● RBW 2 MHz 1.9 μs ● VBW 3 MHz | Mode Auto FFT | 2.03 dBn |
| 8DPSK/MCH | Date: 21.0 CT.2021 03:10:56 Spectrum Ref Level 25.00 dBm Offset Att 30 dB SWT IPk View 20 dBm 10 dBm -10 dBm -20 dBm | 9.80 dB ● RBW 2 MHz 1.9 μs ● VBW 3 MHz | Mode Auto FFT | 2.03 dBn |
| 8DPSK/MCH | Date: 21.0 CT.2021 03:10:56 | 9.80 dB ● RBW 2 MHz 1.9 μs ● VBW 3 MHz | Mode Auto FFT | 2.03 dBn |
| 8DPSK/MCH | Date: 21.0 CT.2021 03:10:56 | 9.80 dB ● RBW 2 MHz 1.9 μs ● VBW 3 MHz | Mode Auto FFT | 2.03 dBn |
| 8DPSK/MCH | Date: 21.0 CT.2021 03:10:56 | 9.80 dB ● RBW 2 MHz 1.9 μs ● VBW 3 MHz | Mode Auto FFT | 2.03 dBn |
| 8DPSK/MCH | Date: 21.0 CT.2021 03:10:56 | 9.80 dB ● RBW 2 MHz 1.9 μs ● VBW 3 MHz | Mode Auto FFT | 2.03 dBn |



| | Ref Level 25.00 dBm Offset 9.80 dB | | |
|-----------|------------------------------------|----------|---------------------------|
| | 1Pk View | | |
| | 20 dBm | M1[1] | 3.12 dBr 2.48000120 GH |
| | 10 dBm | M1 | |
| | 0 dBm | | |
| | -10 dBm | | |
| 8DPSK/HCH | -20 dBm | | |
| | -30 dBm | | |
| | -40 dBm | | |
| | -50 dBm | | |
| | -60 dBm | | |
| | -70 dBm | 8001 pts | Span 10.0 MHz |



4.4 20dB Occupy Bandwidth

| Test Requirement: | 47 CFR Part 15C Section 15.247 (a)(1) |
|------------------------|--|
| Test Method: | ANSI C63.10:2013 |
| Test Setup: | Spectrum Analyzer E.U.T Non-Conducted Table Ground Reference Plane |
| | Remark: Offset=Cable loss+ attenuation factor. |
| Limit: | NA |
| Exploratory Test Mode: | Non-hopping transmitting with all kind of modulation and all kind of data type |
| Final Test Mode: | Through Pre-scan, find the DH5 of data type is the worst case of GFSK modulation type, 2-DH5 of data type is the worst case of π /4DQPSK modulation type, 3-DH5 of data type is the worst case of 8DPSK modulation type. Only the worst case is recorded in the report. |
| Test Results: | Pass |

Measurement Data

| Test shannel | 20 | 0dB Occupy Bandwidth (MH | z) |
|--------------|-------|--------------------------|-------|
| Test channel | GFSK | π/4DQPSK | 8DPSK |
| Lowest | 0.972 | 1.366 | 1.354 |
| Middle | 0.962 | 1.366 | 1.352 |
| Highest | 0.962 | 1.364 | 1.352 |



Test plot as follows:





| | Ref Level 25.00 de | Sm Offset 9.80 dB | RBW 30 kHz | | | |
|--------------|---|--|---------------------------|----------------|--|---|
| | Att 30 | dB SWT 63.3 µs 🖷 | VBW 100 kHz | Mode Auto FFT | | |
| | 1Pk View | 1 1 | 1 | M1[1] | | -19.99 dBr |
| | 20 dBm | | | | | 2.47952000 GH |
| | 10 dBm- | | | M2[1] | | 0.18 dBr 2.48004600 GH |
| | 1000 | | Ma | 2 | 1 | |
| | 0 dBm | | ~~~ | 0 | | |
| | -10 dBm | ~ | \sim | · my | | |
| | Contraction of the second s | Min | | m | ~ ~ | |
| | -20 d8m D1 -19.81 | L5 dBm | - | | Man 1 | |
| | -30 dBm | ~ | | | 1 | 2 |
| GFSK/HCH | -30 dbill | | | | | ~ |
| | -40.dBm- | | | | _ | how |
| | | | | | | |
| | -50 dBm- | | | | | |
| | -60 dBm | | | | _ | |
| | | | | | | |
| | -70 dBm | | | | | |
| | CF 2.48 GHz | | 1001 pt | 5 | | Span 2.0 MHz |
| | Marker | X-value | Y-uslue | Function | Euro | ction Result |
| | Type Ref Trc M1 1 | 2.47952 GHz | -19.99 dBm | Function | Fun | ction Result |
| | M2 1 | 2.480046 GHz | 0.18 dBm | | | |
| | D3 M1 1 | 962.0 kHz | -0.11 dB | | | |
| | Spectrum Ref Level 25.00 de | 3m Offset 9.84 dB e | | | | |
| | Spectrum | 3m Offset 9.84 dB e | RBW 30 kHz VBW 100 kHz | Mode Auto FF1 | | |
| | Spectrum Ref Level 25.00 de Att 30 de 1Pk View | 3m Offset 9.84 dB e | | Mode Auto FF1 | | -28.76 dBi |
| | Spectrum Ref Level 25.00 dB Att 30 | 3m Offset 9.84 dB e | | M1[1] | | -28.76 dBi 2.40131000 GH |
| | Spectrum Ref Level 25.00 de Att 30 de 1Pk View | 3m Offset 9.84 dB e | | | | -28.76 dBi |
| | Spectrum Ref Level 25.00 db Att 30 db 1Pk View 20 dBm 10 dBm | 3m Offset 9.84 dB e | | M1[1] | | -28.76 dBr 2.40131000 GH -8.30 dBr |
| | Spectrum Ref Level 25.00 de Att 30 de 1Pk View 20 dBm | 3m Offset 9.84 dB e | | M1[1] | | -28.76 dBr 2.40131000 GH -8.30 dBr |
| | Spectrum Ref Level 25.00 db Att 30 db 1Pk View 20 dBm 10 dBm | 3m Offset 9.84 dB e | VBW 100 kHz | M1[1] | | -28.76 dBr 2.40131000 GH -8.30 dBr |
| | Spectrum Ref Level 25.00 db Att 30 d 1Pk View 20 dBm 10 dBm -10 dBm | 3m Offset 9.84 dB e | VBW 100 kHz | M1[1] | March 1 | -28.76 dBr 2.40131000 GH -8.30 dBr |
| | Spectrum Ref Level 25.00 dB Att 30 / 1Pk View 20 dBm 10 dBm -10 dBm -20 dBm | 3m Offset 9.84 dB dB SWT 63.3 μs | VBW 100 kHz | M1[1] | Mm | -28.76 dBr 2.40131000 GH -8.30 dBr |
| | Spectrum Ref Level 25.00 dB Att 30 / 1Pk View 20 dBm 10 dBm -10 dBm -20 dBm | 3m Offset 9.84 dB e | VBW 100 kHz | M1[1] | h | -28.76 dBr 2.40131000 GH -8.30 dBr |
| r/4DQPSK/LCH | Spectrum Ref Level 25.00 dB Att 30 dBm 1Pk View 20 dBm 10 dBm -10 dBm -20 dBm -30 dBm | 3m Offset 9.84 dB dB SWT 63.3 μs | VBW 100 kHz | M1[1] | March 1 | -28.76 dBr 2.40131000 GH -8.30 dBr |
| r/4DQPSK/LCH | Spectrum Ref Level 25.00 db Att 30 1Pk View 20 dBm 10 dBm -10 dBm -20 dBm | 3m Offset 9.84 dB dB SWT 63.3 μs | VBW 100 kHz | M1[1] | - | -28.76 dBr 2.40131000 GH -8.30 dBr |
| 1/4DQPSK/LCH | Spectrum Ref Level 25.00 dB Att 30 dBm 1Pk View 20 dBm 10 dBm -10 dBm -20 dBm -30 dBm | 3m Offset 9.84 dB dB SWT 63.3 μs | VBW 100 kHz | M1[1] | Man and a second | -28.76 dBr 2.40131000 GH -8.30 dBr |
| 1/4DQPSK/LCH | Spectrum Ref Level 25.00 dB Att 30 1Pk View 20 dBm 10 dBm 0 dBm -10 dBm -30 dBm -30 dBm -50 dBm | 3m Offset 9.84 dB dB SWT 63.3 μs | VBW 100 kHz | M1[1] | | -28.76 dBr 2.40131000 GH -8.30 dBr |
| 1/4DQPSK/LCH | Spectrum Ref Level 25.00 dB Att 30 0 1Pk View 20 dBm 10 dBm 0 dBm -10 dBm -20 dBm -30 dBm 01 -28 30 | 3m Offset 9.84 dB dB SWT 63.3 μs | VBW 100 kHz | M1[1] | | -28.76 dBr 2.40131000 GH -8.30 dBr |
| 1/4DQPSK/LCH | Spectrum Ref Level 25.00 dB Att 30 / 1Pk View 20 dBm 10 dBm 0 dBm -10 dBm -20 dBm -30 dBm -30 dBm -50 dBm -60 dBm | 3m Offset 9.84 dB dB SWT 63.3 μs | VBW 100 kHz | M1[1] | | -28.76 dBr 2.40131000 GH -8.30 dBr |
| 1/4DQPSK/LCH | Spectrum Ref Level 25.00 dB Att 30 / 1Pk View 20 dBm 10 dBm 0 dBm -10 dBm -20 dBm -30 dBm -30 dBm -50 dBm -50 dBm -70 dBm | 3m Offset 9.84 dB dB SWT 63.3 μs | VBW 100 kHz | M1[1] M2[1] | | -28.76 dBi 2.40131000 GH -8.30 dBi 2.40181000 GH |
| 1/4DQPSK/LCH | Spectrum Ref Level 25.00 dB Att 30 / 1Pk View 20 dBm 10 dBm 0 dBm -10 dBm -20 dBm -30 dBm -30 dBm -50 dBm -50 dBm -60 dBm -70 dBm CF 2.402 GHz | 3m Offset 9.84 dB dB SWT 63.3 μs | VBW 100 kHz | M1[1] M2[1] | | -28.76 dBr 2.40131000 GH -8.30 dBr |
| τ/4DQPSK/LCH | Spectrum Ref Level 25.00 dB Att 30 dB 1Pk View 20 dBm 10 dBm 0 dBm -10 dBm -20 dBm -30 dBm -30 dBm -50 dBm -60 dBm -70 dBm CF 2.402 GHz Marker Type Ref | 3m Offset 9.84 dB dB SWT 63.3 µs dB dB SWT 63.3 µs dB | VBW 100 kHz | M1[1] M2[1] | | -28.76 dBi 2.40131000 GH -8.30 dBi 2.40181000 GH |
| t/4DQPSK/LCH | Spectrum Ref Level 25.00 dB Att 30 / 1Pk View 20 dBm 10 dBm 0 dBm -10 dBm -20 dBm -30 dBm -30 dBm -50 dBm -60 dBm -70 dBm CF 2.402 GHz Marker Type Ref M1 1 | 3m Offset 9.84 dB dB SWT 63.3 μs | VBW 100 kHz | M1[1] M2[1] | | -28.76 dBi 2.40131000 GH -8.30 dBi 2.40181000 GH |
| r/4DQPSK/LCH | Spectrum Ref Level 25.00 dB Att 30 dB 1Pk View 20 dBm 10 dBm 0 dBm -10 dBm -20 dBm -30 dBm -30 dBm -50 dBm -60 dBm -70 dBm CF 2.402 GHz Marker Type Ref | 3m Offset 9.84 dB dB SWT 63.3 µs dB dB SWT 63.3 µs dB | VBW 100 kHz | M1[1] M2[1] | | -28.76 dBi 2.40131000 GH -8.30 dBi 2.40181000 GH |

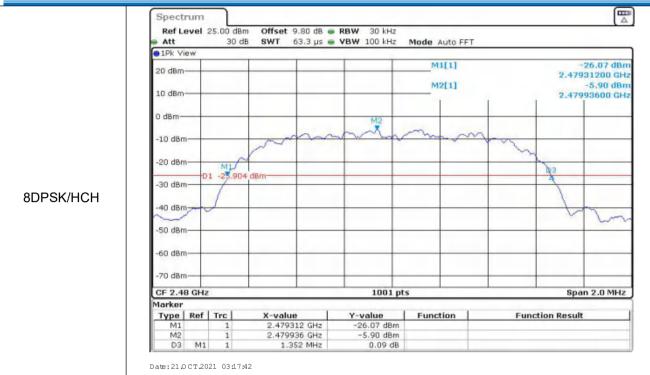


| | Spectrum | | | | | | |
|--------------|---|-----------------------------------|------------------------------------|----------------|------|----------------|--|
| | | Offset 9.80 dB 🖷 SWT 63.3 µs 🖷 | | Mode Auto FF | r | | (1 |
| | 1Pk View | | | | | | |
| | 20 dBm | | | M1[1] | | 2.440 | 27.46 dBm 31000 GHz -6.97 dBm |
| | 10 dBm | | | 1 | E. | | 81000 GHz |
| | 0 dBm | 4 | M2 | | | | |
| | -10 dBm | m | Aver | Amara | mont | | |
| | -20 dBm | 0 | | | | 43 | |
| r/4DQPSK/MCH | -40 dBm | | | | | | |
| | -50 dBm | | | | | | S |
| | -60 dBm | | | | | | |
| | -70 dBm | | | | | | |
| | CF 2.441 GHz | | 1001 pts | | | Spa | n 2.0 MHz |
| | Marker | warter I | Manahara I | 5 | | dia na di | |
| | Type Ref Trc 2 | 2.44031 GHz | -27.46 dBm | Function | Fund | tion Result | |
| | | | | | | | |
| | M2 1 D3 M1 1 Date:21.0CT.2021 03:03:22 | 2.44081 GHz 1.366 MHz | -6.97 dBm 0.21 dB RBW 30 kHz | | | | |
| | M2 1 D3 M1 1 Date: 21.0 CT.2021 03:03:22 Spectrum Ref Level 25.00 dBm 0 Att 30 dB 5 | 1.366 MHz Offset 9.80 dB 👄 | 0.21 dB RBW 30 kHz | Mode Auto FF | r | | |
| | M2 1 D3 M1 1 Date:21.0CT.2021 03:03:22 Spectrum Ref Level 25:00 dBm 0 | 1.366 MHz Offset 9.80 dB 👄 | 0.21 dB RBW 30 kHz | Mode Auto FF | r | | 26.05 dBm |
| | M2 1 D3 M1 1 Date: 21.0 CT 2021 03:03:22 Spectrum Ref Level 25.00 dBm 0 Att 30 dB 5 0 1Pk View | 1.366 MHz Offset 9.80 dB 👄 | 0.21 dB RBW 30 kHz | | r | 2.479 | 26.05 dBm 31000 GHz -5.82 dBm |
| | M2 1 D3 M1 1 Date: 21.0 CT.2021 03:03:22 Spectrum Ref Level 25:00 dBm 0 Att 30 dB 5 1Pk View 20 dBm 1 | 1.366 MHz Offset 9.80 dB 👄 | 0.21 dB RBW 30 kHz | M1[1] | r | 2.479 | 26.05 dBm 31000 GHz -5.82 dBm |
| | M2 1 D3 M1 1 Date: 21.0 CT.2021 03.03.22 Spectrum Ref Level 25.00 dBm Att 30 dB 1Pk View 20 dBm 10 dBm | 1.366 MHz Offset 9.80 dB 👄 | 0.21 dB RBW 30 kHz | M1[1] | | 2.479 | 26.05 dBm 31000 GHz -5.82 dBm |
| | M2 1 D3 M1 1 Date: 21.0 CT.2021 03:03:22 Spectrum Ref Level 25.00 dBm 0 Att 30 dB 30 8 • 1Pk View 20 dBm 10 dBm 10 dBm • 0 dBm -10 dBm -20 dBm My | 1.366 MHz | 0.21 dB RBW 30 kHz | M1[1] | | 2.479 | 26.05 dBm 31000 GHz -5.82 dBm |
| r/4DQPSK/HCH | M2 1 D3 M1 1 Date: 21.0 CT.2021 03:03:22 Spectrum Ref Level 25.00 dBm Att 30 dB 6 1Pk View 20 dBm 10 dBm 10 dBm -10 dBm -10 dBm | 1.366 MHz | 0.21 dB RBW 30 kHz | M1[1] | | 2.479 | (|
| r/4DQPSK/HCH | M2 1 D3 M1 1 Date: 21.0 CT.2021 03.03.22 Spectrum Ref Level 25.00 dBm 0 Att 30 dB 30 8 1 Pk View 20 dBm 10 10 10 dBm 0 0 8 -10 dBm -10 4 10 4 -30 dBm -20 dBm -30 4 -30 4 | 1.366 MHz | 0.21 dB RBW 30 kHz | M1[1] | | 2.479 | 26.05 dBm 31000 GHz -5.82 dBm |
| t/4DQPSK/HCH | M2 1 D3 M1 1 Date: 21.0 CT 2021 03:03:22 Spectrum Ref Level 25.00 dBm Att 30 dB 30 • 1Pk View 20 dBm 10 dBm 10 dBm 0 40 dBm -30 dBm -10 dBm -10 dBm -30 dBm -50 dBm -50 dBm | 1.366 MHz | 0.21 dB RBW 30 kHz | M1[1] | | 2.479 | 26.05 dBm 31000 GHz -5.82 dBm |
| τ/4DQPSK/HCH | M2 1 D3 M1 1 Date: 21.0 CT.2021 03:03:22 Spectrum Ref Level 25.00 dBm Att 30 dB 30 ● 1Pk View 20 dBm 10 dBm 10 dBm 0 dBm -10 dBm -20 dBm D1 -25.823 dBm -30 dBm -50 dBm -60 dBm | 1.366 MHz | 0.21 dB RBW 30 kHz | M1[1] | | 2.479 | 26.05 dBm 31000 GHz -5.82 dBm |
| t/4DQPSK/HCH | M2 1 D3 M1 1 Date: 21.0 CT 2021 03:03:22 Spectrum Ref Level 25.00 dBm Att 30 dB 30 • 1Pk View 20 dBm 10 dBm 10 dBm 0 40 dBm -30 dBm -10 dBm -10 dBm -30 dBm -50 dBm -50 dBm | 1.366 MHz | 0.21 dB RBW 30 kHz | M1[1] M2[1] | | 2.479 | 31000 GHz -5.82 dBm |
| τ/4DQPSK/HCH | M2 1 D3 M1 1 Date: 21.0 CT 2021 03:03:22 Spectrum Ref Level 25.00 dBm Att 30 dB 30 IPK View 20 dBm 10 dBm 0 dBm 0 dBm 10 dBm -20 dBm 01 - 25.823 dBm -30 dBm -60 dBm -60 dBm -50 dBm -60 dBm -60 dBm -70 dBm -70 dBm -70 dBm | 1.366 MHz | 0.21 dB | M1[1] | | 2.479 2.479 | 26.05 dBm 31000 GHz -5.82 dBm 81000 GHz |
| τ/4DQPSK/HCH | M2 1 D3 M1 1 Date: 21.0 CT 2021 03:03:22 Spectrum Ref Level 25.00 dBm Att 30 dB 0 Att 30 dB 0 IPk View 20 dBm 0 10 dBm 0 0 -10 dBm 0 0 -20 dBm 01 -20 B23 dBm -30 dBm -30 dBm -40 dBm -50 dBm -50 dBm -50 dBm -70 dBm CF 2.48 GHz Marker Type Ref Trc 3 | 1.366 MHz | 0.21 dB | M1[1] M2[1] | | 2.479 | 26.05 dBm 31000 GHz -5.82 dBm 81000 GHz |
| τ/4DQPSK/HCH | M2 1 D3 M1 1 Date: 21.0 CT 2021 03:03:22 Spectrum Ref Level 25.00 dBm Att 30 dB 30 10 dBm 0 0 10 dBm 0 0 -10 dBm 0 0 -20 dBm 0 -25.823 dBm -30 dBm -50 dBm -60 dBm -60 dBm -70 dBm -70 dBm CF 2.48 GHz Marker Type | 1.366 MHz | 0.21 dB | M1[1] | | 2.479 2.479 | 26.05 dBm 31000 GHz -5.82 dBm 81000 GHz |



| | Ref Level 25.00 d Att 30 | | RBW 30 kHz VBW 100 kHz | Mode Auto FF | r | | |
|-----------|--|--|---------------------------|----------------|---------|-----------------------------|--|
| | 1Pk View | ab ann 00.0 ps | 100 100 1012 | MOUS AULO IT | | | |
| | 20 dBm | | - | M1[1] | | | 50 dBm |
| | | | | M2[1] | | 2.401312 | 43 dBm |
| | 10 dBm | | | | | 2.401938 | |
| | 0 dBm | | | | | | |
| | O ODIN | | M2 | | | | |
| | -10 dBm | mm | man | mon | March 1 | | |
| | -20 dBm | ~~ | | | - h | | |
| | ML | | | | | 13 | |
| | -30 dBm D1 -28.4 | 26 dBm | | | | T | |
| 8DPSK/LCH | -40 dBm | | | | | | |
| | ~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~ | | | | | ~~~ | ~~~ |
| | -50 dBm- | | | | - | | |
| | -60 dBm | | | | | | |
| | -ou dem | | | | | | |
| | -70 dBm | | | | | | |
| | CF 2.402 GHz | | 1001 pt | s | | Span 2. | .0 MHz |
| | Marker | | | | | | |
| | Type Ref Trc | 2.401312 GHz | -28.50 dBm | Function | Fund | ction Result | - |
| | M2 1 | 2.401938 GHz | -8.43 dBm | | | | _ |
| | | | | | | | |
| | D3 M1 1 Date:21.0CT.2021 03:1 Spectrum Ref. evel. 25.00.0 | | -0.21 dB | 1 | | | |
| | Date: 21 0 CT 2021 03:1 Spectrum Ref Level 25.00 d Att 30 | 0:29 IBm Offset 9.80 dB • | | Mode Auto FF | r | | |
| | Date: 21.0 CT 2021 03:1 Spectrum Ref Level 25.00 d Att 30 1Pk View | 0:29 IBm Offset 9.80 dB • | RBW 30 kHz | | r | -27. | |
| | Date: 21 0 CT 2021 03:1 Spectrum Ref Level 25.00 d Att 30 | 0:29 IBm Offset 9.80 dB • | RBW 30 kHz | M1[1] | r | 2.440312 | 35 dBm 200 GHz |
| | Date: 21.0 CT 2021 03:1 Spectrum Ref Level 25.00 d Att 30 1Pk View | 0:29 IBm Offset 9.80 dB • | RBW 30 kHz | | r | 2.440312 | 35 dBm 200 GHz 05 dBm |
| | Date: 21 OCT 2021 03:1 Spectrum Ref Level 25.00 d Att 30 10 dBm 10 dBm | 0:29 IBm Offset 9.80 dB • | RBW 30 kHz | M1[1] | r | 2.440312 | 35 dBm 200 GHz 05 dBm |
| | Date: 21 O CT 2021 03:1 Spectrum Ref Level 25:00 d Att 30 1Pk View 20 dBm | 0:29 IBm Offset 9.80 dB • | RBW 30 kHz VBW 100 kHz | M1[1] | r | 2.440312 | 35 dBm 200 GHz 05 dBm |
| | Date: 21 OCT 2021 03:1 Spectrum Ref Level 25.00 d Att 30 10 dBm 10 dBm | 0:29 IBm Offset 9.80 dB • | RBW 30 kHz VBW 100 kHz | M1[1] | r | 2.440312 | 35 dBm 200 GHz 05 dBm |
| | Date: 21 O CT 2021 03:1 Spectrum Ref Level 25:00 d Att 30 1Pk View 20 dBm 10 dBm 0 dBm -10 dBm | 0:29 IBm Offset 9.80 dB • | RBW 30 kHz VBW 100 kHz | M1[1] | r | 2.440312 | 35 dBm 200 GHz 05 dBm |
| | Date: 21 OCT 2021 03:1 Spectrum Ref Level 25.00 d Att 30 1Pk View 20 dBm 10 dBm -10 dBm -20 dBm | 0.29 IBm Offset 9.80 dB dB SWT 63.3 µs | RBW 30 kHz VBW 100 kHz | M1[1] | | 2.440312 -7, 2.440938 | 35 dBm 200 GHz 05 dBm |
| | Date: 21 O CT 2021 03:1 Spectrum Ref Level 25.00 d Att 30 10 dBm 10 dBm -10 dBm -20 dBm | 0.29 IBm Offset 9.80 dB dB SWT 63.3 µs | RBW 30 kHz VBW 100 kHz | M1[1] | r | 2.440312 | 35 dBm 200 GHz 05 dBm |
| 8DPSK/MCH | Date: 21 O CT 2021 03:1 Spectrum Ref Level 25.00 d Att 30 1Pk View 20 dBm 10 dBm -10 dBm -20 dBm -20 dBm 1 -27 dBm | 0.29 IBm Offset 9.80 dB dB SWT 63.3 µs | RBW 30 kHz VBW 100 kHz | M1[1] | r | 2.440312 -7, 2.440938 | 05 dBm |
| 8DPSK/MCH | Date: 21 O CT 2021 03:1 Spectrum Ref Level 25.00 d Att 30 10 dBm 10 dBm -10 dBm -20 dBm 0 1 -20 dBm | 0.29 IBm Offset 9.80 dB dB SWT 63.3 µs | RBW 30 kHz VBW 100 kHz | M1[1] | r | 2.440312 -7, 2.440938 | 35 dBm 200 GHz 05 dBm |
| 8DPSK/MCH | Date: 21 O CT 2021 03:1 Spectrum Ref Level 25.00 d Att 30 1Pk View 20 dBm 10 dBm -10 dBm -20 dBm -20 dBm 1 -27 dBm | 0.29 IBm Offset 9.80 dB dB SWT 63.3 µs | RBW 30 kHz VBW 100 kHz | M1[1] | | 2.440312 -7, 2.440938 | 35 dBm 200 GHz 05 dBm |
| 8DPSK/MCH | Date: 21 O CT.2021 03:1 Spectrum Ref Level 25.00 d Att 30 10 dBm 10 dBm -10 dBm -20 dBm -30 dBm -30 dBm -50 dBm | 0.29 IBm Offset 9.80 dB dB SWT 63.3 µs | RBW 30 kHz VBW 100 kHz | M1[1] | | 2.440312 -7, 2.440938 | 35 dBm 200 GHz 05 dBm |
| 8DPSK/MCH | Date: 21 O CT.2021 03:1 Spectrum Ref Level 25.00 d Att 30 PIk View 20 dBm 10 dBm -10 dBm -20 dBm -30 dBm 0 dBm -40 dBm | 0.29 IBm Offset 9.80 dB dB SWT 63.3 µs | RBW 30 kHz VBW 100 kHz | M1[1] | | 2.440312 -7, 2.440938 | 35 dBm 200 GHz 05 dBm |
| 8DPSK/MCH | Date: 21 O CT.2021 03:1 Spectrum Ref Level 25.00 d Att 30 10 dBm 10 dBm -10 dBm -20 dBm -30 dBm -30 dBm -50 dBm | 0.29 IBm Offset 9.80 dB dB SWT 63.3 µs | RBW 30 kHz VBW 100 kHz | M1[1] | | 2.440312 -7, 2.440938 | 35 dBm 200 GHz 05 dBm |
| 8DPSK/MCH | Date: 21 O CT 2021 03:1 Spectrum Ref Level 25.00 d Att 30 10 dBm 10 dBm 10 dBm -10 dBm -20 dBm -30 dBm -30 dBm -40 dBm -50 dBm -60 dBm -70 dBm | 0.29 IBm Offset 9.80 dB dB SWT 63.3 µs | RBW 30 kHz VBW 100 kHz | M1[1] M2[1] | | 2.440312 -7. 2.440938 | 35 dBm 600 GHz 05 dBm 600 GHz |
| 8DPSK/MCH | Date: 21 O CT 2021 03:1 Spectrum Ref Level 25.00 d Att 30 10 dBm 10 dBm 10 dBm -10 dBm -20 dBm -20 dBm -30 dBm -50 dBm -60 dBm | 0.29 IBm Offset 9.80 dB dB SWT 63.3 µs | RBW 30 kHz VBW 100 kHz | M1[1] M2[1] | | 2.440312 -7, 2.440938 | 35 dBm 600 GHz 05 dBm 600 GHz |
| 8DPSK/MCH | Date: 21 O CT.2021 03:1 Spectrum Ref Level 25.00 d Att 30 IPk View 20 dBm 10 dBm 0 dBm -10 dBm -20 dBm -30 dBm -30 dBm -40 dBm -50 dBm -60 dBm -70 dBm | 0.29 IBm Offset 9.80 dB • dB SWT 63.3 μs • | RBW 30 kHz VBW 100 kHz | M1[1] M2[1] | | 2.440312 -7. 2.440938 | 35 dBm 600 GHz 05 dBm 600 GHz |
| 8DPSK/MCH | Date: 21 O CT 2021 03:1 Spectrum Ref Level 25.00 d Att 30 10 Hk View 20 dBm 10 dBm -10 dBm -20 dBm -20 dBm -30 dBm -50 dBm -60 dBm -70 dBm CF 2.441 GHz Marker | 0.29 Bm Offset 9.80 dB • dB SWT 63.3 μs • 145 dBm | RBW 30 kHz VBW 100 kHz | M1[1] | | 2.440312 -7. 2.440938 | 35 dBm 600 GHz 05 dBm 600 GHz |







4.5 Carrier Frequencies Separation

| Test Requirement: | 47 CFR Part 15C Section 15.247 (a)(1) |
|------------------------|--|
| Test Method: | ANSI C63.10:2013 |
| Test Setup: | Spectrum Analyzer E.U.T Non-Conducted Table Ground Reference Plane |
| | Remark: Offset=Cable loss+ attenuation factor. |
| Limit: | 2/3 of the 20dB bandwidth |
| | Remark: the transmission power is less than 0.125W. |
| Exploratory Test Mode: | Hopping transmitting with all kind of modulation and all kind of data type |
| Final Test Mode: | Through Pre-scan, find the DH5 of data type is the worst case of GFSK modulation type, 2-DH5 of data type is the worst case of π /4DQPSK modulation type, 3-DH5 of data type is the worst case of 8DPSK modulation type. Only the worst case is recorded in the report. |
| Test Results: | Pass |



Measurement Data

| | GFSK mod | le | |
|--------------|---|-------------|--------|
| Test channel | Carrier Frequencies Separation (MHz) | Limit (MHz) | Result |
| Lowest | 1.005 | ≥0.648 | Pass |
| Middle | 1.000 | ≥0.648 | Pass |
| Highest | 1.000 | ≥0.648 | Pass |
| | π/4DQPSK m | node | |
| Test channel | Carrier Frequencies Separation (MHz) | Limit (MHz) | Result |
| Lowest | 1.413 | ≥0.911 | Pass |
| Middle | 1.000 | ≥0.911 | Pass |
| Highest | 1.000 | ≥0.911 | Pass |
| | 8DPSK mo | de | |
| Test channel | Carrier Frequencies Separation (MHz) | Limit (MHz) | Result |
| Lowest | 1.005 | ≥0.903 | Pass |
| Middle | 1.005 | ≥0.903 | Pass |
| Highest | 1.005 | ≥0.903 | Pass |

| Mode | 20dB bandwidth (MHz) (worse case) | Limit (MHz) (Carrier Frequencies Separation) |
|----------|--------------------------------------|---|
| GFSK | 0.972 | 0.648 |
| π/4DQPSK | 1.366 | 0.911 |
| 8DPSK | 1.354 | 0.903 |



Test plot as follows:





| | 1Pk View | Odb SWT : | 18.9 µs 🖷 VBW 300 | | Auto FFT | | | |
|--------------|--|----------------------------|--|------------|--------------|----------|--------|------------------------------------|
| | 20 dBm | | | | 1[1] 1[1] | | | 3.00 dBm 15865 GHz 0.06 dB |
| | 10 dBm | | M1 | | | D1 | | |
| | 0 dBm | | | 1 | | | | |
| | -10 dBm | | | | | ~ | | |
| | -20 dBm | | | | | | 1 | |
| GFSK/HCH | -30 dBm | | | | | | 1 | |
| | 10 49 | | | | | | | L |
| | -40 dBm | | | | | | | |
| | -50 dBm | | | | | | | |
| | -60 dBm | | | | | | | |
| | -70 dBm | | | | | | | |
| | Start 2.478 GHz | | 6 | 25 pts | | | Stop 2 | 2.481 GHz |
| | Date: 21 OCT 2021 03: Spectrum Ref Level 25.00 | dBm Offset 9 | 9.84 dB 🕳 RBW 100 | | | | | |
| | Spectrum Ref Level 25.00 Att 3 | dBm Offset 9 | 9.84 dB ⊛ RBW 100 18.9 µs ⊛ VBW 300 | | Auto FFT | | | |
| | Spectrum Ref Level 25.00 | dBm Offset 9 | | KHz Mode / | 1[1] | | | -2.16 dBm 74039 GHz |
| | Spectrum Ref Level 25.00 Att 3 1Pk View | dBm Offset 9 | | KHz Mode / | | | 2.401 | -2.16 dBm 74039 GHz |
| | Spectrum Ref Level 25.00 Att 3 1Pk View 20 dBm | dBm Offset 9 | | KHz Mode / | 1[1] 1[1] | 01 | 2.401 | -2.16 dBm 74039 GHz -0.28 dB |
| | Spectrum Ref Level 25.00 Att 3 1Pk View 20 dBm 10 dBm | dBm Offset 9 0 dB SWT 3 | | KHz Mode / | 1[1] 1[1] | JI | 2.401 | -2.16 dBm 74039 GHz -0.28 dB |
| | Spectrum Ref Level 25.00 Att 3 1Pk View 20 dBm 10 dBm 0 dBm | dBm Offset 9 0 dB SWT 3 | | KHz Mode / | 1[1] 1[1] | 211 | 2.401 | -2.16 dBm 74039 GHz -0.28 dB |
| r/4DQPSK/LCH | Spectrum Ref Level 25.00 Att 30 1Pk View 20 dBm 10 dBm 0 dBm -10 dBm -20 dBm | dBm Offset 9 0 dB SWT 3 | | KHz Mode / | 1[1] 1[1] | 711 B | 2.401 | -2.16 dBm 74039 GHz -0.28 dB |
| 1/4DQPSK/LCH | Spectrum Ref Level 25.00 Att 3 1Pk View 20 dBm 10 dBm 0 dBm | dBm Offset 9 0 dB SWT 3 | | KHz Mode / | 1[1] 1[1] | 01 | 2.401 | -2.16 dBm 74039 GHz -0.28 dB |
| 1/4DQPSK/LCH | Spectrum Ref Level 25.00 Att 30 1Pk View 20 dBm 10 dBm 0 dBm -10 dBm -20 dBm | dBm Offset 9 0 dB SWT 3 | | KHz Mode / | 1[1] 1[1] | 011 B | 2.401 | -2.16 dBm 74039 GHz -0.28 dB |
| 1/4DQPSK/LCH | Spectrum Ref Level 25.00 Att 30 1Pk View 20 dBm 10 dBm 0 dBm -10 dBm -20 dBm | dBm Offset 9 0 dB SWT 3 | | KHz Mode / | 1[1] 1[1] | 51 | 2.401 | 74039 GHz -0.28 dB |
| t/4DQPSK/LCH | Spectrum Ref Level 25.00 Att 30 1Pk View 20 dBm 10 dBm 0 dBm -10 dBm -20 dBm -30 dBm -40 dBm | dBm Offset 9 0 dB SWT 3 | | KHz Mode / | 1[1] 1[1] | | 2.401 | -2.16 dBm 74039 GHz -0.28 dB |
| ſ/4DQPSK/LCH | Spectrum Ref Level 25.00 Att 30 1Pk View 20 dBm 10 dBm 0 dBm -10 dBm -20 dBm -30 dBm -30 dBm -50 dBm | dBm Offset 9 0 dB SWT 3 | | KHz Mode / | 1[1] 1[1] | | 2.401 | -2.16 dBm 74039 GHz -0.28 dB |



| | Spectrum | | | | | |
|--------------|---|-------------|--|----------------------------|-------|---|
| | Ref Level 25.00 dBm Att 30 dB 1Pk View | | 0 dB 🖷 RBW 100 k 9 µs 🖷 VBW 300 k | | D FFT | |
| | 20 dBm | | | M1[1 D1[1 | | -1.07 dBm 2.44115385 GHz 0.02 dB 1.00000 MHz |
| | 10 dBm | | MI | | DI | |
| | -10 dBm | ~~~ | | | | |
| | -20 dBm | | | | | |
| /4DQPSK/MCH | -30 dBm | | | | | |
| | -40 dBm | | | | | |
| | -50 dBm | | | | | |
| | -60 dBm | | | | | |
| | | | | | | |
| | Start 2.44 GHz Date:21.0CT2021 03:40:3 Spectrum | 4 | 62 | 5 pts | | Stop 2.443 GHz |
| | Start 2.44 GHz Date:21.0 CT 2021 03:40:3 | Offset 9.80 | 623 0 d8 ● RBW 100 k 9 µs ● VBW 300 k | Hz |) FFT | |
| | Stort 2.44 GHz Date: 21.0 CT 2021 03:40:3 Spectrum Ref Level 25.00 dBm Att 30 dB 1Pk View 20 dBm | Offset 9.80 |) dB 🖷 RBW 100 k | Hz | 1 | 0.28 dBm 2.47915865 GHz 0.01 dB |
| | Start 2.44 GHz Date: 21.0 CT 2021 03:40:3 Spectrum Ref Level 25.00 dBm Att 30 dB 1Pk View | Offset 9.80 |) dB 🖷 RBW 100 k | Hz Hz Mode Auto M1[1 | 1 | 0.28 dBm 2.47915865 GHz 0.01 dB |
| | Stort 2.44 GHz Date: 21.0 CT 2021 03:40:3 Spectrum Ref Level 25.00 dBm Att 30 dB 1Pk View 20 dBm 10 dBm | Offset 9.80 | 0 d8 ● RBW 100 k 9 µs ● VBW 300 k | Hz Hz Mode Auto M1[1 | 1 | 0.28 dBm 2.47915865 GHz 0.01 dB |
| /4DQPSK/HCH | Stort 2.44 GHz Date: 21.0 CT 2021 03:40:3 Spectrum Ref Level 25.00 dBm Att 30 dB 1Pk View 20 dBm 10 dBm | Offset 9.80 | 0 d8 ● RBW 100 k 9 µs ● VBW 300 k | Hz Hz Mode Auto M1[1 | 1 | 0.28 dBm 2.47915865 GHz 0.01 dB |
| /4DQPSK/HCH | Stort 2.44 GHz Date: 21.0 CT.2021 03:40:3 Spectrum Ref Level 25.00 dBm • Att 30 dB • 1Pk View 20 dBm 10 dBm • 0 dBm -10 dBm -30 dBm | Offset 9.80 | 0 d8 ● RBW 100 k 9 µs ● VBW 300 k | Hz Hz Mode Auto M1[1 | 1 | |
| 1/4DQPSK/HCH | Stort 2.44 GHz Date: 21.0 CT.2021 03:40:3 Spectrum Ref Level 25.00 dBm • Att 30 dB • 1Pk View 20 dBm 10 dBm • dBm -10 dBm -20 dBm | Offset 9.80 | 0 d8 ● RBW 100 k 9 µs ● VBW 300 k | Hz Hz Mode Auto M1[1 | 1 | 0.28 dBm 2.47915865 GHz 0.01 dB |
| 1/4DQPSK/HCH | Start 2.44 GHz Date: 21.0 CT 2021 03:40:3 Spectrum Ref Level 25.00 dBm • Att 30 dB • 1Pk View 20 dBm 10 dBm -10 dBm -20 dBm -30 dBm | Offset 9.80 | 0 d8 ● RBW 100 k 9 µs ● VBW 300 k | Hz Hz Mode Auto M1[1 | 1 | 0.28 dBm 2.47915865 GHz 0.01 dB |
| t/4DQPSK/HCH | Start 2.44 GHz Date: 21.0 CT.2021 03:40:3 Spectrum Ref Level 25.00 dBm • Att 30 dB • 1Pk View 20 dBm 10 dBm -10 dBm -20 dBm -30 dBm -50 dBm | Offset 9.80 | 0 d8 ● RBW 100 k 9 µs ● VBW 300 k | Hz Hz Mode Auto M1[1 | 1 | 0.28 dBm 2.47915865 GHz 0.01 dB |



| | Ref Level 25.00 | dBm Offset | 9.84 dB 🖷 RBN | W 100 kHz | | | | |
|-----------|---|------------|---|------------------|------------------------|------|--------|------------------------------------|
| | | | 18.9 µs 🖷 VB | | Mode Auto FFT | | | |
| | 20 dBm | | | | M1[1] | | 2.402 | -2.27 dBm 15385 GHz |
| | 10 dBm | | | | D1[1] | | 1. | -0.06 dB 00481 MHz |
| | 0 dBm | | MI | | | | | |
| | - | | ~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~ | | ~~~~ | - | | |
| | -10 dBm | | | | | | | |
| 8DPSK/LCH | -20 dBm | | | | | - | | |
| | -30 dBm | | | - | | | | |
| | -40 dBm- | - | | | | | - | _ |
| | -50 dBm | | | | | _ | | |
| | -60 dBm | | | | | | | |
| | -70 dBm | | | | | | | |
| | -70 0011 | | | | | | | |
| | Stort 2.401 GHz Date: 21 0 CT 2021 03: Spectrum | | | 625 pt | 5 | | Stop 2 | 2.404 GHz |
| | Date: 21.0 CT 2021 03: Spectrum Ref Level 25.00 Att 30 | dBm Offset | 9.80 dB 🖷 RB1 18.9 µs 🖷 VB1 | W 100 kHz | Mode Auto FF1 | | Stop 2 | |
| | Date: 21 O CT 2021 03: Spectrum Ref Level 25.00 Att 30 1Pk View | dBm Offset | | W 100 kHz | | | | -0.89 dBm |
| | Date: 21.0 CT 2021 03: Spectrum Ref Level 25.00 Att 30 10k View 20 dBm | dBm Offset | | W 100 kHz | Mode Auto FF1 | | 2.441 | -0.89 dBm 15385 GHz |
| | Date: 21.0 CT 2021 03: Spectrum Ref Level 25.00 Att 30 10 dBm 10 dBm | dBm Offset | | W 100 kHz | Mode Auto FF1 M1[1] | | 2.441 | -0.89 dBm 15385 GHz -0.01 dB |
| | Date: 21.0 CT 2021 03: Spectrum Ref Level 25.00 Att 30 10k View 20 dBm | dBm Offset | 18.9 µs 👄 VB | W 100 kHz | Mode Auto FF1 M1[1] | - 01 | 2.441 | -0.89 dBm 15385 GHz -0.01 dB |
| | Date: 21.0 CT 2021 03: Spectrum Ref Level 25.00 Att 30 10 dBm 10 dBm | dBm Offset | 18.9 µs 👄 VB | W 100 kHz | Mode Auto FF1 M1[1] | DI | 2.441 | -0.89 dBm 15385 GHz -0.01 dB |
| 8DPSK/MCH | Date: 21.0 CT 2021 03: Spectrum Ref Level 25.00 Att 30 1Pk View 20 dBm 10 dBm 0 dBm | dBm Offset | 18.9 µs 👄 VB | W 100 kHz | Mode Auto FF1 M1[1] | DI | 2.441 | -0.89 dBm 15385 GHz -0.01 dB |
| 8DPSK/MCH | Date: 21.0 CT 2021 03: Spectrum Ref Level 25.00 Att 30 1 Pk View 20 dBm 10 dBm 0 dBm -10 dBm | dBm Offset | 18.9 µs 👄 VB | W 100 kHz | Mode Auto FF1 M1[1] | D1 | 2.441 | -0.89 dBm 15385 GHz -0.01 dB |
| 8DPSK/MCH | Date: 21.0 CT 2021 03: Spectrum Ref Level 25.00 Att 30 1 Pk View 20 dBm 10 dBm -10 dBm -20 dBm | dBm Offset | 18.9 µs 👄 VB | W 100 kHz | Mode Auto FF1 M1[1] | D1 | 2.441 | -0.89 dBm 15385 GHz -0.01 dB |
| 8DPSK/MCH | Date: 21.0 CT 2021 03: Spectrum Ref Level 25.00 Att 30 1 Pk View 20 dBm 10 dBm -10 dBm -20 dBm -30 dBm | dBm Offset | 18.9 µs 👄 VB | W 100 kHz | Mode Auto FF1 M1[1] | D1 | 2.441 | -0.89 dBm 15385 GHz -0.01 dB |
| 8DPSK/MCH | Date: 21.0 CT 2021 03: Spectrum Ref Level 25.00 Att 30 1Pk View 20 dBm 10 dBm -10 dBm -20 dBm -30 dBm -40 dBm | dBm Offset | 18.9 µs 👄 VB | W 100 kHz | Mode Auto FF1 M1[1] | D1 | 2.441 | -0.89 dBm 15385 GHz -0.01 dB |
| 8DPSK/MCH | Date: 21 OCT 2021 03: Spectrum Ref Level 25.00 Att 30 1Pk View 20 dBm 10 dBm -10 dBm -20 dBm -30 dBm -40 dBm -50 dBm | dBm Offset | 18.9 µs 👄 VB | W 100 kHz | Mode Auto FF1 M1[1] | D1 | 2.441 | -0.89 dBm 15385 GHz -0.01 dB |



| | | 18.9 µs 👄 VBW 300 kHz Mode | Auto FFT | |
|-----------|----------|----------------------------|----------------|-------------------------------------|
| 8DPSK/HCH | IPk View | | | |
| | 20 dBm | | M1[1] D1[1] | 0.08 dBr 2.47915385 GH 0.18 d |
| | 10 dBm | | 1 | 1.00481 MH |
| | -Q dBm | MI | <u>01</u> | |
| | -10 dBm | | | 1 |
| | -20 dBm- | | | |
| | -30 dBm | | | |
| | -40 dBm- | | | ~ |
| | -50 dBm | | | |
| | -60 dBm | | | |
| | -70 dBm | 625 pts | | Stop 2.481 GHz |



4.6 Hopping Channel Number

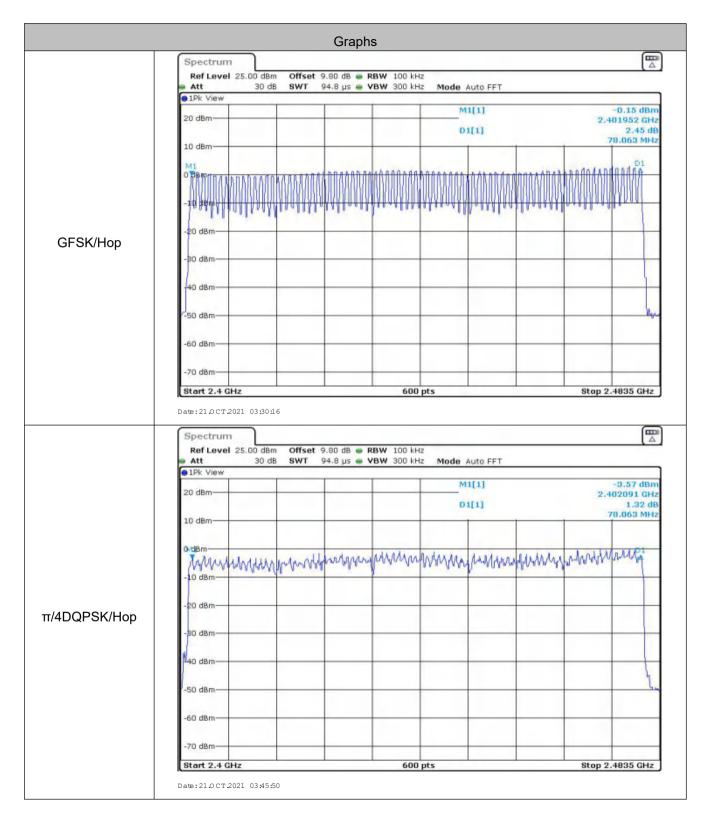
| Test Requirement: | 47 CFR Part 15C Section 15.247 (a)(1) |
|------------------------|--|
| Test Method: | ANSI C63.10:2013 |
| Test Setup: | Spectrum Analyzer E.U.T Non-Conducted Table Ground Reference Plane Remark: Offset=Cable loss+ attenuation factor. |
| Limit: | At least 15 channels |
| Exploratory Test Mode: | hopping transmitting with all kind of modulation and all kind of data type |
| Final Test Mode: | Through Pre-scan, find the DH5 of data type is the worst case of GFSK modulation type, 2-DH5 of data type is the worst case of π /4DQPSK modulation type, 3-DH5 of data type is the worst case of 8DPSK modulation type. Only the worst case is recorded in the report. |
| Test Results: | Pass |

Measurement Data

| Mode | Hopping channel numbers | Limit |
|----------|-------------------------|-------|
| GFSK | 79 | ≥15 |
| π/4DQPSK | 79 | ≥15 |
| 8DPSK | 79 | ≥15 |



Test plot as follows:





| | | Offset 9.80 dB RBW 100 kH RWT 94.8 µs VBW 300 kH | | |
|------------|----------|--|-----------------------|--|
| | 1Pk View | | | |
| | 20 dBm | | M1[1] D1[1] | -3.67 dBn 2.401812 GH 2.19 df 78.342 MH |
| | 10 dBm | | | 70.372 MH |
| | Q.dBm | mundamatuhan | mangungana | MANNAMANA AN |
| | -10 dBm | 10000-0-0-0-0 | a see shad a dear and | 000 |
| 8DPSK/Hop | -20 dBm | | | |
| odr Sk/Hop | -30 dBm | | | |
| | -40 dBm | | | |
| | -50 dBm | | | 1 |
| | -60 dBm | | | |
| | -70 dBm | | | |



4.7 Dwell Time

| Test Requirement: | 47 CFR Part 15C Section 15.247 (a)(1) |
|-------------------|---|
| Test Method: | ANSI C63.10:2013 |
| Test Setup: | Spectrum Analyzer E.U.T Non-Conducted Table Ground Reference Plane |
| | Remark: Offset=Cable loss+ attenuation factor. |
| Test Mode: | Hopping transmitting with all kind of modulation and all kind of data type. |
| Limit: | 0.4 Second |
| Test Results: | Pass |



Measurement Data

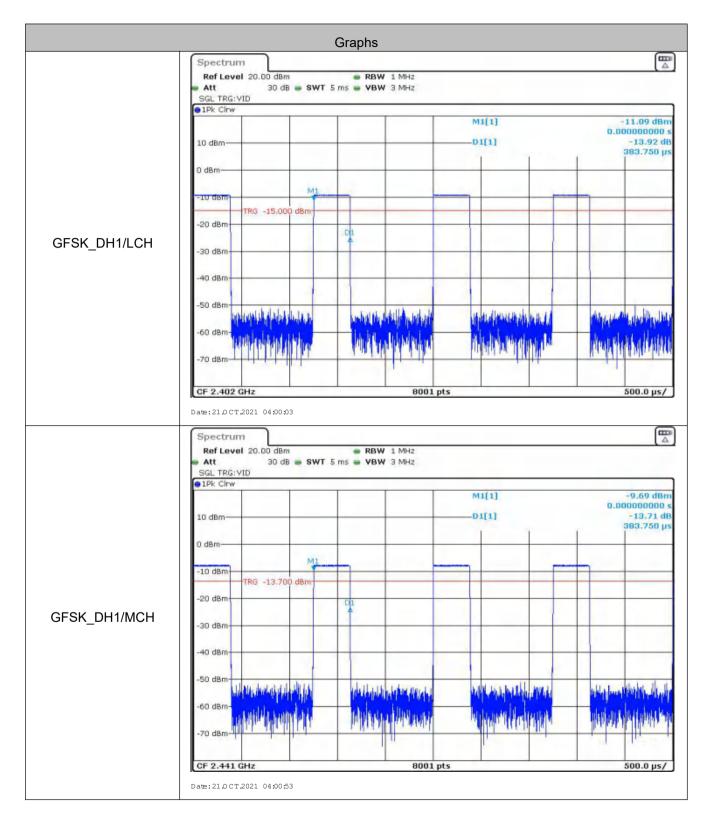
| Mode | Packet | Channel | Burst Width [ms/hop/ch] | Dwell Time[s] | Limit (second) |
|----------|--------|---------|----------------------------|---------------|----------------|
| GFSK | DH1 | LCH | 0.38 | 0.122 | ≤0.4 |
| GFSK | DH1 | МСН | 0.38 | 0.122 | ≤0.4 |
| GFSK | DH1 | НСН | 0.38 | 0.122 | ≤0.4 |
| π/4DQPSK | 2DH1 | LCH | 0.39 | 0.125 | ≤0.4 |
| π/4DQPSK | 2DH1 | МСН | 0.39 | 0.125 | ≤0.4 |
| π/4DQPSK | 2DH1 | НСН | 0.39 | 0.125 | ≤0.4 |
| 8DPSK | 3DH1 | LCH | 0.39 | 0.125 | ≤0.4 |
| 8DPSK | 3DH1 | МСН | 0.39 | 0.125 | ≤0.4 |
| 8DPSK | 3DH1 | НСН | 0.39 | 0.125 | ≤0.4 |
| GFSK | DH3 | LCH | 1.64 | 0.262 | ≤0.4 |
| GFSK | DH3 | МСН | 1.64 | 0.262 | ≤0.4 |
| GFSK | DH3 | НСН | 1.64 | 0.262 | ≤0.4 |
| π/4DQPSK | 2DH3 | LCH | 1.64 | 0.262 | ≤0.4 |
| π/4DQPSK | 2DH3 | МСН | 1.64 | 0.262 | ≤0.4 |
| π/4DQPSK | 2DH3 | НСН | 1.64 | 0.262 | ≤0.4 |
| 8DPSK | 3DH3 | LCH | 1.64 | 0.262 | ≤0.4 |
| 8DPSK | 3DH3 | МСН | 1.64 | 0.262 | ≤0.4 |
| 8DPSK | 3DH3 | НСН | 1.64 | 0.262 | ≤0.4 |
| GFSK | DH5 | LCH | 2.89 | 0.308 | ≤0.4 |
| GFSK | DH5 | МСН | 2.89 | 0.308 | ≤0.4 |
| GFSK | DH5 | НСН | 2.89 | 0.308 | ≤0.4 |
| π/4DQPSK | 2DH5 | LCH | 2.88 | 0.307 | ≤0.4 |
| π/4DQPSK | 2DH5 | МСН | 2.88 | 0.307 | ≤0.4 |
| π/4DQPSK | 2DH5 | НСН | 2.88 | 0.307 | ≤0.4 |
| 8DPSK | 3DH5 | LCH | 2.89 | 0.308 | ≤0.4 |
| 8DPSK | 3DH5 | МСН | 2.89 | 0.308 | ≤0.4 |
| 8DPSK | 3DH5 | НСН | 2.89 | 0.308 | ≤0.4 |

Remark:

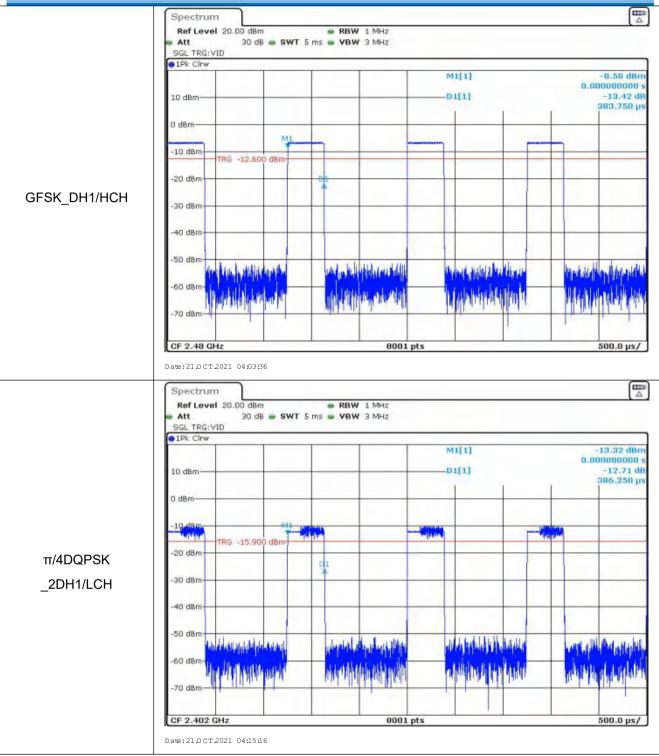
The test period: T= 0.4 Second/Channel x 79 Channel = 31.6 s DH1/2DH1/3DH1 Dwell time = Burst Width(ms)*(1600/ (2*79))*31.6 DH3/2DH3/3DH3 Dwell time = Burst Width (ms)*(1600/ (4*79))*31.6 DH5/2DH5/3DH5 Dwell time = Burst Width (ms)*(1600/ (6*79))*31.6



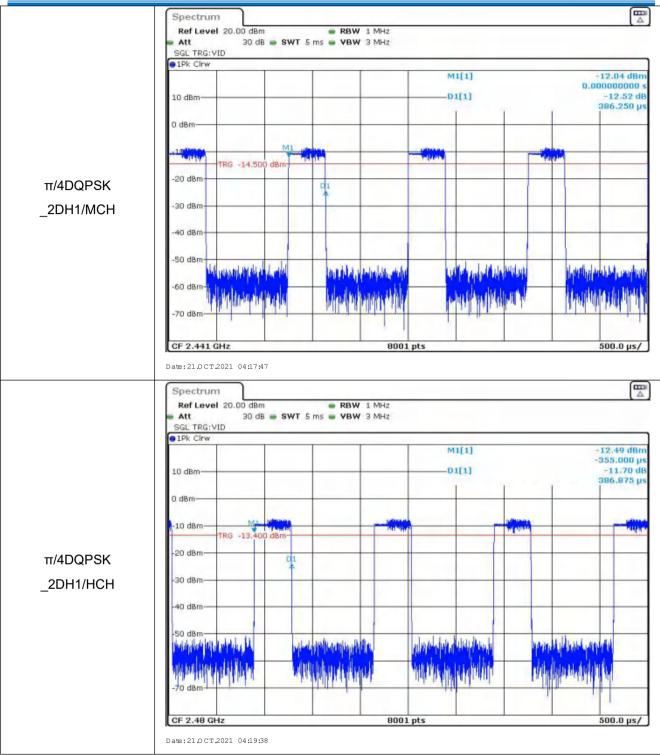
Test plot as follows:



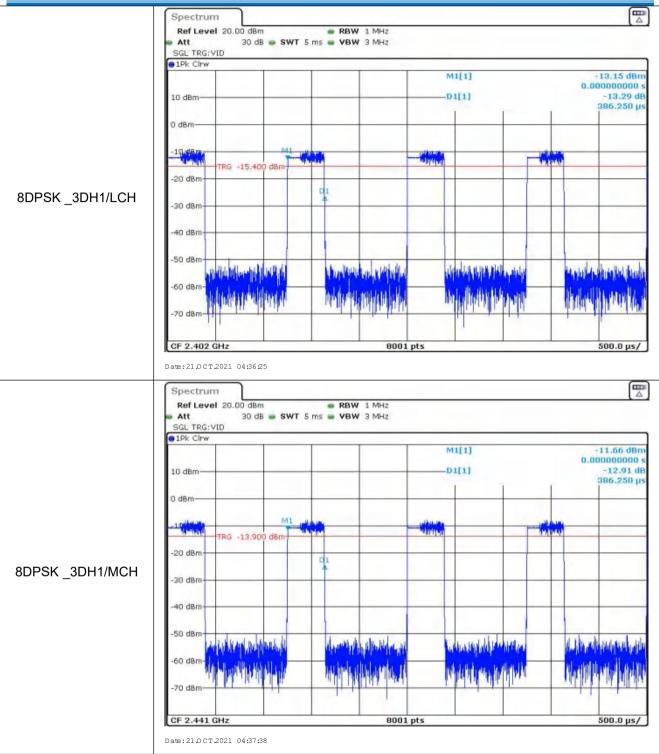




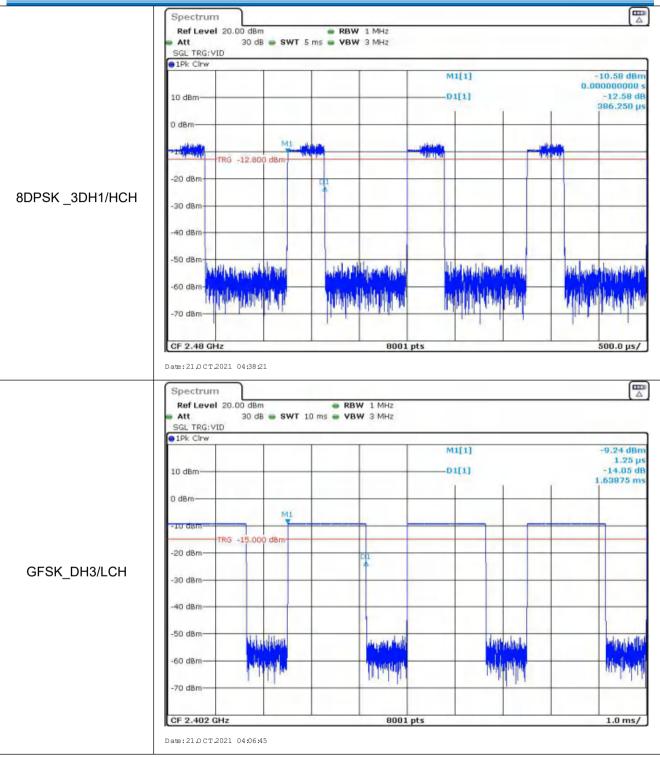








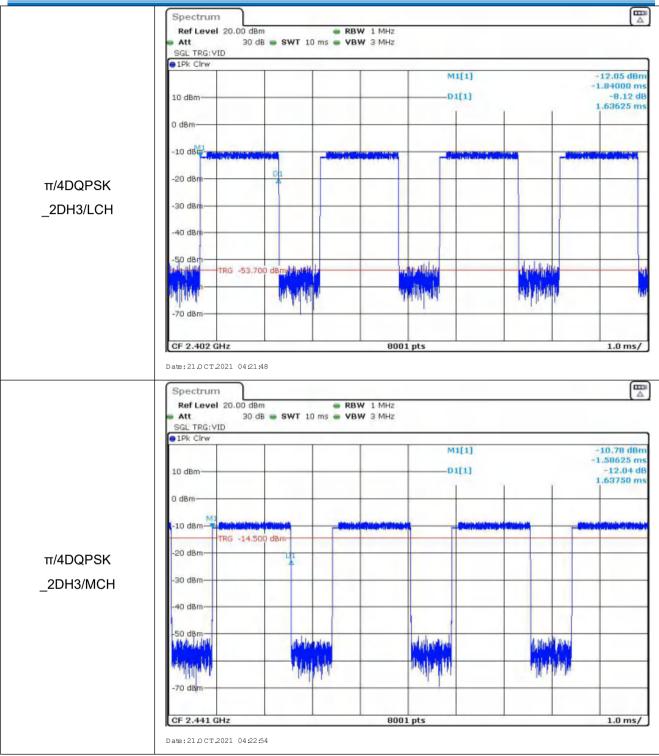




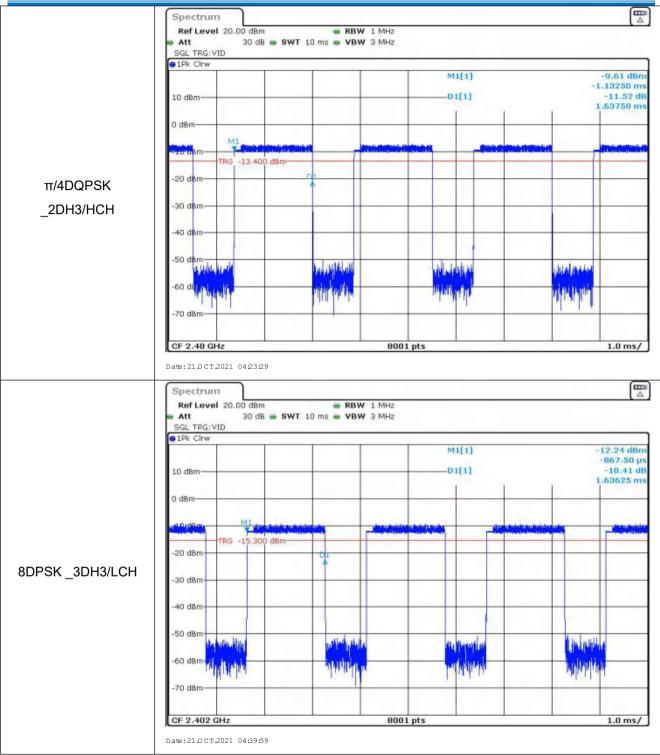


| | Spectrum | | | | |
|--------------|-------------------------|--|--|---------|--|
| | Ref Level 20 | .00 dBm 30 dB SWT 10 ms | RBW 1 MHz VBW 3 MHz | | |
| | SGL TRG:VID | 00 00 0 0111 20 110 | | | |
| | DEK CILM | | | M1[1] | -7.84 dBm |
| | 10 dBm | | | -D1[1] | 1.25 µs -13.33 dB |
| | | | | I I I | 1.63875 ms |
| | 0 dBm- | ML | | | |
| | -10 dBm- | -13.600 d8m | | | |
| | -20 dBm- | 10.000 0011 | op | | |
| GFSK_DH3/MCH | | | Î | | |
| _ | -30 dBm | | | | |
| | -40 dBm | | | | |
| | -50 dBm- | | | | |
| | | Providence and a second se | a the first and | AND UND | tely of the |
| | -60 dBm- | AND WHA | the state of the | ATHADA | HICKORY A |
| | -70 dBm | | | | |
| | 05.0.441.0115 | | 0001 | | 1.0 |
| | CF 2.441 GHz | | 8001 pts | | 1.0 ms/ |
| | Date:21.0CT.2021 | . 04:07:56 | | | |
| | Spectrum | | | | |
| | Ref Level 20 Att | 30 dB 🕳 SWT 10 ms | RBW 1 MHz VBW 3 MHz | | |
| | SGL TRG: VID Pk Clrw | | | | |
| | | | | M1[1] | -6.87 dBm 1.25 µs |
| | 10 dBm | | | -D1[1] | -12.43 dB 1.63875 ms |
| | 0 dBm | | | | |
| | | | | | |
| | -10 dBm-TRG | -12.600 dBm | | | |
| | -20 dBm | | D1 | | |
| | | | | | |
| GFSK_DH3/HCH | -30 dBm | | | | |
| GFSK_DH3/HCH | -30 dBm | | | | |
| GFSK_DH3/HCH | -30 dBm | | | | |
| GFSK_DH3/HCH | | | | | المراجعة ال |
| GFSK_DH3/HCH | -40 dBm | | Liked Am | | Allegeater |
| GFSK_DH3/HCH | -40 dBm | Interference | n Haratan Ngripagan | | |
| GFSK_DH3/HCH | -40 dBm | | Minister Maria | | nskopreta ^j Nilipitataja |
| GFSK_DH3/HCH | -40 dBm | | 8001 pts | | 1.0 ms/ |

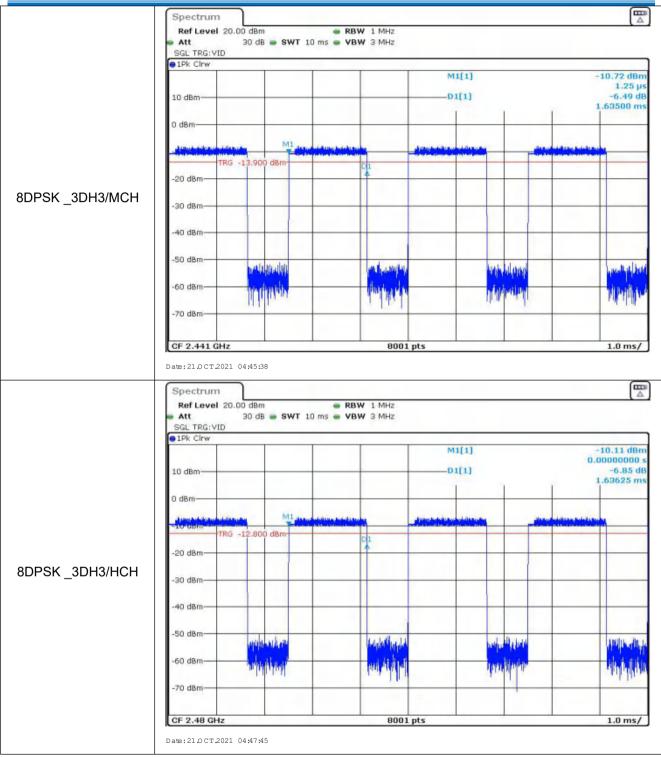








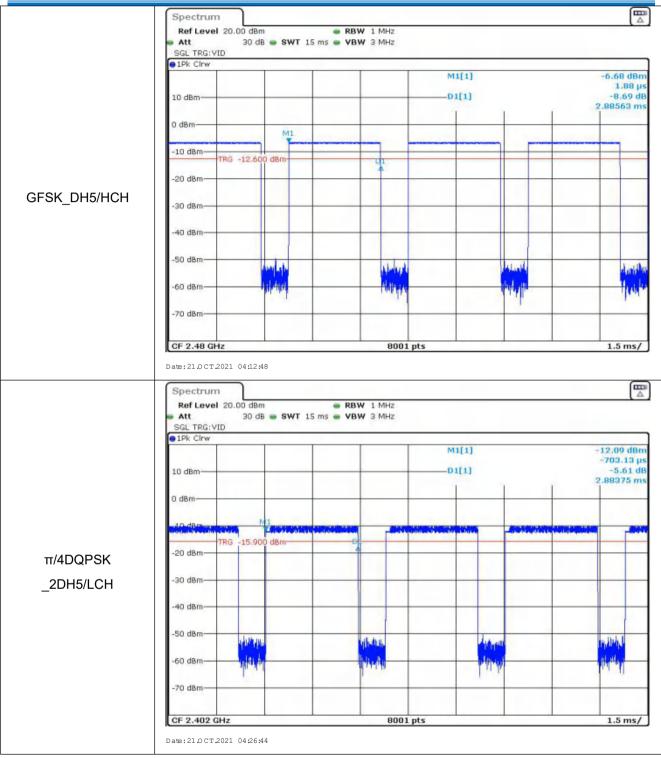




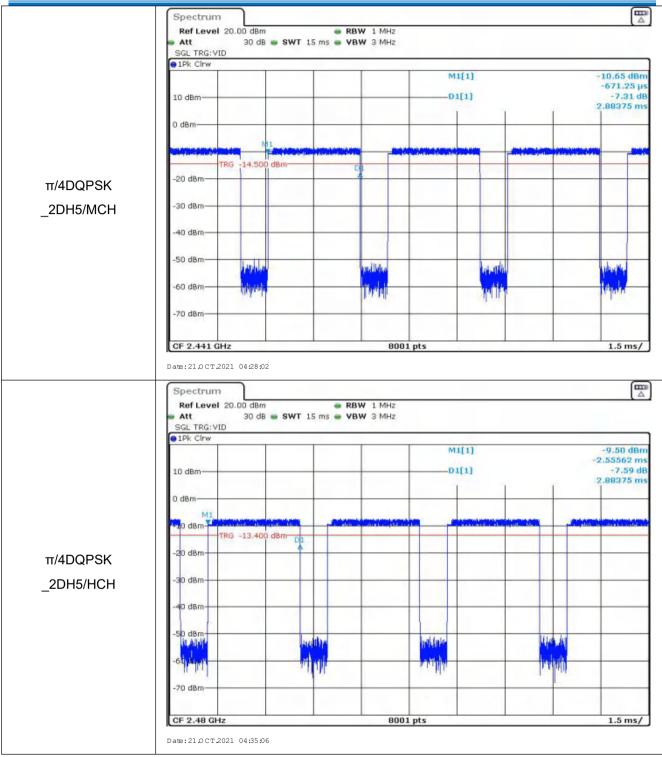


| | Spectrum | 1 | | | |
|--------------|--|---|----------------------------|--|---|
| | Ref Level 20. | | RBW 1 MHz | | |
| | SGL TRG: VID | 30 dB 👄 SWT 15 ms | VBW 3 MHz | | |
| | 1Pk Clrw | | | | |
| | | | | M1[1] | -9.36 dBm |
| | 10 dBm | | | D1[1] | 0.00000000 s -5.01 dB |
| | | | | | 2.88563 ms |
| | 0 dBm | | | | |
| | | MI | | | |
| | -10 dBm | | Da | | |
| | -20 dBm | -15.000 dBm | Î | | |
| | 20 0011 | | | | |
| GFSK_DH5/LCH | -30 dBm | | | | |
| | | | | | |
| | -40 dBm | | | | |
| | -50 d8m- | | | | |
| | -do dom | Andrew 1 | hand | 10-14 | The second state |
| | -60 dBm- | disk det | 6.08.2.0 | | |
| | | | deck | the state of the s | in the |
| | -70 dBm | | | | |
| | | | | | |
| | | | | | 1.5 ms/ |
| | CF 2.402 GHz Date: 21.0 CT 2021 Spectrum | 04:10:00 | 8001 pts | | |
| | Date: 21 D CT 2021 Spectrum Ref Level 20. Att | 1 | RBW 1 MHz | | |
| | Date: 21.0 CT.2021 Spectrum Ref Level 20. | 00 dBm | RBW 1 MHz | | |
| | Date: 21 O CT 2021 Spectrum Ref Level 20. Att SGL TRG: VID | 00 dBm | RBW 1 MHz | M1[1] | -7.89 dBm |
| | Date: 21 O CT 2021 Spectrum Ref Level 20. Att SGL TRG: VID | 00 dBm | RBW 1 MHz | | -7.89 dBm 0.00000000 s -5.33 dB |
| | Date: 21 O CT 2021 Spectrum Ref Level 20. Att SGL TRG:VID IPk Cirw 10 dBm | 00 dBm | RBW 1 MHz | M1[1] | -7.89 dBm 0.00000000 s -5.33 dB |
| | Date: 21 OCT 2021 Spectrum Ref Level 20. Att SGL TRG:VID 1Pk Cirw | 00 dBm 30 dB • SWT 15 ms | RBW 1 MHz | M1[1] | -7.89 dBm 0.00000000 s |
| | Date: 21 O CT 2021 Spectrum Ref Level 20. Att SGL TRG:VID IPk Cirw 10 dBm | 00 dBm | • RBW 1 MHz • VBW 3 MHz | M1[1] | -7.89 dBm 0.00000000 s -5.33 dB |
| | Date: 21 0 CT 2021 Spectrum Ref Level 20. Att SGL TRG: VID 10 dBm 0 dBm -10 dBm -10 dBm | 00 dBm 30 dB • SWT 15 ms | RBW 1 MHz | M1[1] | -7.89 dBm 0.00000000 s -5.33 dB |
| | Date: 21 0 CT 2021 Spectrum Ref Level 20. Att SGL TRG: VID 10 dBm 0 dBm -10 dBm -10 dBm | 00 dBm 30 dB • SWT 15 ms | • RBW 1 MHz • VBW 3 MHz | M1[1] | -7.89 dBm 0.00000000 s -5.33 dB |
| GFSK_DH5/MCH | Date: 21 O CT 2021 Spectrum Ref Level 20. Att SGL TRG:VID ID dBm 0 dBm -10 dBm TRG -20 dBm | 00 dBm 30 dB • SWT 15 ms | • RBW 1 MHz • VBW 3 MHz | M1[1] | -7.89 dBm 0.00000000 s -5.33 dB |
| GFSK_DH5/MCH | Date: 21 O CT 2021 Spectrum Ref Level 20. Att SGL TRG:VID ID dBm 0 dBm -10 dBm TRG | 00 dBm 30 dB • SWT 15 ms | • RBW 1 MHz • VBW 3 MHz | M1[1] | -7.89 dBm 0.00000000 s -5.33 dB |
| GFSK_DH5/MCH | Date: 21 O CT 2021 Spectrum Ref Level 20. Att SGL TRG:VID ID dBm 0 dBm -10 dBm TRG -20 dBm | 00 dBm 30 dB • SWT 15 ms | • RBW 1 MHz • VBW 3 MHz | M1[1] | -7.89 dBm 0.00000000 s -5.33 dB |
| GFSK_DH5/MCH | Date: 21 0 CT 2021 Spectrum Ref Level 20. Att SGL TRG: VID 10 dBm 10 dBm -10 dBm -20 dBm -30 | 00 dBm 30 dB • SWT 15 ms | • RBW 1 MHz • VBW 3 MHz | M1[1] | -7.89 dBm 0.00000000 s -5.33 dB |
| GFSK_DH5/MCH | Date: 21 0 CT 2021 Spectrum Ref Level 20. Att SGL TRG: VID 10 dBm 10 dBm -10 dBm -20 dBm -30 | 00 dBm 30 dB SWT 15 ms M1 -13.700 dBm | • RBW 1 MHz • VBW 3 MHz | M1[1] | -7.89 dBn 0.00000000 : -5.33 dB 2.88563 m: |
| GFSK_DH5/MCH | Date: 21 0 CT 2021 Spectrum Ref Level 20. Att SGL TRG: VID 10 dBm 0 dBm -10 dBm -20 dBm -30 dBm -30 dBm -50 d | 00 dBm 30 dB • SWT 15 ms | RBW 1 MHz VBW 3 MHz | M1[1] | -7.89 dBm 0.00000000 s -5.33 dB |
| GFSK_DH5/MCH | Date: 21 0 CT 2021 Spectrum Ref Level 20. Att SGL TRG: VID 10 dBm 10 dBm 10 dBm -10 dBm -20 dBm -30 dBm -40 dBm | 00 dBm 30 dB SWT 15 ms M1 -13.700 dBm | RBW 1 MHz VBW 3 MHz | M1[1] | -7.89 dBm 0.00000000 -5.33 dB 2.88563 ms |
| GFSK_DH5/MCH | Date: 21 0 CT 2021 Spectrum Ref Level 20. Att SGL TRG: VID 10 dBm 0 dBm -10 dBm -20 dBm -30 dBm -30 dBm -50 d | 00 dBm 30 dB • SWT 15 ms | RBW 1 MHz VBW 3 MHz | M1[1] | -7.89 dBm 0.00000000 -5.33 dB 2.88563 ms |
| GFSK_DH5/MCH | Date: 21 0 CT 2021 Spectrum Ref Level 20. Att SGL TRG: VID 10 dBm 0 dBm -10 dBm -10 dBm -20 dBm -30 dBm -30 dBm -60 d | 00 dBm 30 dB • SWT 15 ms | RBW 1 MHz VBW 3 MHz | M1[1] | -7.89 dBm 0.00000000 -5.33 dB 2.88563 ms |
| GFSK_DH5/MCH | Date: 21 0 CT 2021 Spectrum Ref Level 20. Att SGL TRG: VID 10 dBm 0 dBm -10 dBm -10 dBm -20 dBm -30 dBm -30 dBm -60 d | 00 dBm 30 dB • SWT 15 ms | RBW 1 MHz VBW 3 MHz | M1[1] D1[1] | -7.89 dBm 0.00000000 -5.33 dB 2.88563 ms |

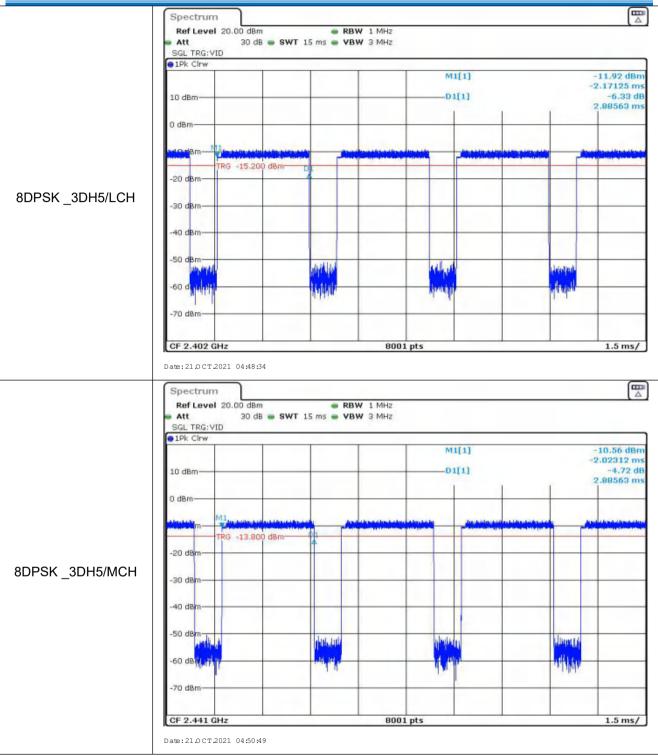




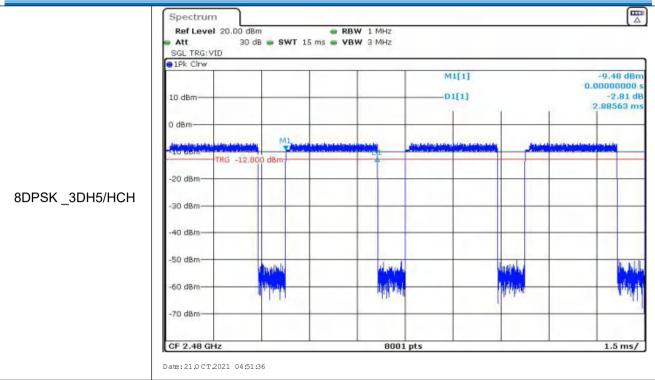














4.8 Band-edge for RF Conducted Emissions

| Test Requirement: | 47 CFR Part 15C Section 15.247 (d) |
|------------------------|---|
| Test Method: | ANSI C63.10:2013 |
| Test Setup: | Spectrum Analyzer E.U.T Non-Conducted Table Ground Reference Plane Remark: Offset=cable loss+ attenuation factor. |
| Limit: | In any 100 kHz bandwidth outside the frequency band in which the spread spectrum intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement. |
| Exploratory Test Mode: | Hopping and Non-hopping transmitting with all kind of modulation and all kind of data type |
| Final Test Mode: | Through Pre-scan, find the DH5 of data type is the worst case of GFSK modulation type, 2-DH5 of data type is the worst case of π /4DQPSK modulation type, 3-DH5 of data type is the worst case of 8DPSK modulation type. Only the worst case is recorded in the report. |
| Test Results: | Pass |



| Mode | Test Channel | Frequency [MHz] | Frequency Hopping | Emission Level [dBm] | Limit [dBm] | Result |
|----------|-----------------|--------------------|----------------------|-------------------------|----------------|--------|
| | | | Off | -50.790 | -19.88 | PASS |
| GFSK | LCH | 2400 | On | -49.970 | -18.08 | PASS |
| | | | Off | -53.300 | -17.58 | PASS |
| GFSK | НСН | 2483.5 | On | -51.540 | -17.26 | PASS |
| | | | Off | -51.200 | -24.15 | PASS |
| π/4DQPSK | LCH | 2400 | On | -50.280 | -21.1 | PASS |
| | | | Off | -53.210 | -21.59 | PASS |
| π/4DQPSK | НСН | 2483.5 | On | -51.800 | -19.67 | PASS |
| | | | Off | -50.920 | -24.16 | PASS |
| 8DPSK | LCH | 2400 | On | -47.840 | -20.73 | PASS |
| | | | Off | -52.960 | -21.65 | PASS |
| 8DPSK | НСН | 2483.5 | On | -51.450 | -19.68 | PASS |



Test plot as follows:

| | | | | | Graph | s | | | | | |
|-----------------|---|--------------|---|---------|--|--|---|--------------|--------------|---------------------------|--|
| | Spectr | um | | | | | | | | | |
| | | evel 2 | 25.00 dBn | | | RBW 100 kH | | | | | |
| | Att 1Pk Vie | 3W | 30 df | SWT | 151.7 µs | • VBW 300 kHz | z Mode | Auto FFT | | | |
| | 20 dBm- | | | | | | M | 1[1] | | | 0.12 dBm |
| | | | | | | | M | 2[1] | | | 19910 GHz 50.79 dBm |
| | 10 dBm- | | | | | | | | M1 | 2.40 | 00000 GHz |
| | 0 dBm- | - | _ | | | | | | 1 | | |
| | -10 dBm | - | | | - | | _ | | | | |
| | -20 dBm | Di | 1 -19.880 | dBm | - | | | - | | | |
| | | | | | | | | | | | |
| | -30 dBm | - | | | | | | | | | |
| GFSK/LCH/No Hop | -40 dBm | - | | MS | - | | | - | | | |
| | 4 SAUCE | at the state | - | | Participation of the | warma him hay | atalacacitatos | 13 N | A Land Analy | A MAN AND AND AND AND AND | |
| | -60 dBm | | | | | | | | | | |
| | | | | | | | | | | | |
| | -70 dBm | _ | | | | | | | | | |
| | Start 2. Marker | .31 G | Hz | _ | | 8001 (| pts | _ | | Stop | 2.441 GHz |
| | Type | Ref | Trc | X-valu | | Y-value | Fund | tion | Fund | ction Result | |
| | M1 M2 | | 1 | | 2.4 GHz | 0.12 dBm -50.79 dBm | | | | | |
| | M3 | | 1 | 2 | .39 GHz | -51.13 dBm | 1 | | | | |
| | M4 | | 1 | 2 | .31 GHz | -50.53 dBm | 1 | - | | | |
| | M5 Date:21.0 | | 1 | 2.34363 | 343 GHz | -47.86 dBm | 1 | | | | Ē |
| | Date: 21.0 Spectr Ref Le | um | 1 21 02:32:4 25.00 dBn | 2.34363 | 9.84 dB | • RBW 100 kH; | 2 | Auto FFT | | | |
| | M5 Date:21.0 Spectr | um evel 2 | 1 21 02:32:4 | 2.34363 | 9.84 dB | | z z Mode | Auto FFT | | | |
| | M5 Date: 21.0 Spectr Ref Le Att | um evel 2 | 1 21 02:32:4 25.00 dBn | 2.34363 | 9.84 dB | • RBW 100 kH; | z z Mode | Auto FFT | | 2,4 | 1.92 dBm |
| | M5 Date: 21.0 Spectr Ref Le Att | um evel 2 | 1 21 02:32:4 25.00 dBn | 2.34363 | 9.84 dB | • RBW 100 kH; | z z Mode M | | | - | 1.92 dBm 36740 GHz 49.97 dBm |
| | M5 Date: 21.0 Spectr Ref Le • Att • 1Pk Vie 20 dBm- 10 dBm- | um evel 2 | 1 21 02:32:4 25.00 dBn | 2.34363 | 9.84 dB | • RBW 100 kH; | z z Mode M | 1[1] | 1 | - | 1.92 dBm 36740 GHz |
| | M5 Date: 21.0 Spectr Ref Le Att 1Pk Vie 20 dBm- | um evel 2 | 1 21 02:32:4 25.00 dBn | 2.34363 | 9.84 dB | • RBW 100 kH; | z z Mode M | 1[1] | | - | 1.92 dBm 36740 GHz 49.97 dBm |
| | M5 Date: 21.0 Spectr Ref Le • Att • 1Pk Vie 20 dBm- 10 dBm- | evel 2 | 1 21 02:32:4 25.00 dBn | 2.34363 | 9.84 dB | • RBW 100 kH; | z z Mode M | 1[1] | | - | 1.92 dBm 36740 GHz 49.97 dBm |
| | MS Date: 21.0 Spectr Ref Le Att 10 k Vie 20 dBm- 10 dBm- 0 dBm- | evel 2 | 1 21 02:32:4 25.00 dBn | 2.34363 | 9.84 dB | • RBW 100 kH; | z z Mode M | 1[1] | | - | 1.92 dBm 36740 GHz 49.97 dBm |
| | MS Date: 21.0 Spectr Ref Le Att 10 dBm- 10 dBm- -10 dBm- -20 dBm | evel 2 | 1 21 02:32 x 25.00 dBm 30 df | 2.34363 | 9.84 dB | • RBW 100 kH; | z z Mode M | 1[1] | | - | 1.92 dBm 36740 GHz 49.97 dBm |
| | MS Date: 21.0 Spectr Ref Le 1Pk Vie 20 dBm- 10 dBm- -10 dBm -20 dBm -30 dBm | evel 2 | 1 21 02:32 x 25.00 dBm 30 df | 2.34363 | 9.84 dB | • RBW 100 kH; | z z Mode M | 1[1] | | - | 1.92 dBm 36740 GHz 49.97 dBm |
| GFSK/LCH/Hop | MS Date: 21.0 Spectr Ref Le Att 10 dBm- 10 dBm- -10 dBm- -20 dBm | evel 2 | 1 21 02:32 x 25.00 dBm 30 df | 2.34363 | 9.84 dB 151.7 µs 1 | • RBW 100 kH; | z z Mode M | 1[1] 2[1] | | - | 1.92 dBm 36740 GHz 49.97 dBm |
| GFSK/LCH/Hop | MS Date: 21.0 Spectr Ref Le 1Pk Vie 20 dBm- 10 dBm- -10 dBm -20 dBm -30 dBm | olum | 1 21 02:32 x 25.00 dBm 30 df | 2.34363 | 9.84 dB 151.7 µs 1 | • RBW 100 kH; | z z Mode M | 1[1] 2[1] | | - | 1.92 dBm 36740 GHz 49.97 dBm |
| GFSK/LCH/Hop | MS Date: 21.0 Spectr Ref Le Att 10 dBm- 10 dBm- -10 dBm- -20 dBm -30 dBm -40 dBm | evel 2 | 1 21 02:32 x 25.00 dBm 30 df | 2.34363 | 9.84 dB 151.7 µs 1 | • RBW 100 kH; | z z Mode M | 1[1] 2[1] | | - | 1.92 dBm 36740 GHz 49.97 dBm |
| GFSK/LCH/Hop | MS Date: 21.0 Spectr Ref Le Att 10 dBm- 10 dBm- -10 dBm- -20 dBm -20 dBm -30 dBm -40 dBm -60 dBm | D | 1 21 02:32 x 25.00 dBm 30 df | 2.34363 | 9.84 dB 151.7 µs 1 | • RBW 100 kH; | z z Mode M | 1[1] 2[1] | | - | 1.92 dBm 36740 GHz 49.97 dBm |
| GFSK/LCH/Hop | MS Date: 21.0 Spectr Ref Le Att 10 dBm- 10 dBm- 0 dBm- -10 dBm -20 dBm -30 dBm -30 dBm -30 dBm -30 dBm -30 dBm -30 dBm | D | 1 21 02:32× 25.00 dBm 30 df | 2.34363 | 9.84 dB 151.7 µs 1 | RBW 100 kH; | z Mode | 1[1] 2[1] | | | 1.92 dBm 36740 GHz 49.97 dBm 00000,GHz |
| GFSK/LCH/Hop | MS Date: 21.0 Spectr Ref Le Att 10 dBm- 10 dBm- 10 dBm- -10 dBm -20 dBm -20 dBm -30 dBm -40 dBm -50 dBm -60 dBm -70 dBm | D | 1 21 02:32× 25.00 dBm 30 df | 2.34363 | 9.84 dB 151.7 µs 1 | • RBW 100 kH; | z Mode | 1[1] 2[1] | | | 1.92 dBm 36740 GHz 49.97 dBm |
| GFSK/LCH/Hop | MS Date: 21.0 Spectr Ref Le Att 10 dBm- 10 dBm- 10 dBm- -10 dBm -20 dBm -20 dBm -30 dBm -40 dBm -50 dBm -60 dBm -70 dBm Start 2. Marker Type | D | 1 21 02:32× 25.00 dBm 30 df 1 -18.080 6 au -14.080 Hz Trc | 2.34363 | 9.84 dB | RBW 100 kH; VBW 300 kH; | z Mode M M supples | 1[1] 2[1] | | | 1.92 dBm 36740 GHz 49.97 dBm 00000, CHz |
| GFSK/LCH/Hop | MS Date: 21.0 Spectr Ref Le Att 10 dBm- 10 dBm- 10 dBm- -10 dBm -20 dBm -30 dBm -30 dBm -30 dBm -30 dBm -30 dBm -70 dBm Stort 2. Marker Type M1 | D) | 1 21 02:32× 25.00 dBm 30 dH 1 -18.080 Hz Hz | 2.34363 | 9.84 dB | RBW 100 kH; VBW 300 kH; 300 kH | 2 Mode M M M M M | 1[1] 2[1] | | 2.4 | 1.92 dBm 36740 GHz 49.97 dBm 00000, CHz |
| GFSK/LCH/Hop | MS Date: 21.0 Spectr Ref Le Att 1Pk Vie 20 dBm- 10 dBm- 0 dBm- -10 dBm -20 dBm -30 dBm -40 dBm -60 dBm -60 dBm -70 dBm Marker Type M1 20 | D) | 1 21 02:32× 25.00 dBm 30 df 1 -18.080 Hz Hz Tre 1 1 1 | 2.34363 | 9.84 dB = 151.7 μs = 5 5 5 6 774 GH2 39 GHz | RBW 100 kH; VBW 300 kH; 00 kH; | 2 Mode M M M Source ts Funct | 1[1] 2[1] | | 2.4 | 36740 GHz 49.97 dBm 00000, GHz |
| GFSK/LCH/Hop | MS Date: 21.0 Spectr Ref Le Att 10 dBm- 10 dBm- -10 dBm -20 dBm -30 dBm -40 dBm -50 dBm -60 dBm -70 dBm | D) | 1 21 02:32× 25.00 dBn 30 df 1 -18.080 1 -18.080 Hz Hz | 2.34363 | 9.84 dB | RBW 100 kH; VBW 300 kH; 0 | z Mode M M | 1[1] 2[1] | | 2.4 | 1.92 dBm 36740 GHz 49.97 dBm 00000, GHz |



| | Spectrum | | | | | | | | | Ē |
|-----------------|---|--------------------|----------------------------------|----------------|---------------------------|-------------|-----------|---------|------------|--------------------------|
| | Ref Level | | | | | | | | | |
| | Att 1Pk View | 30 di | 8 SWT 75.8 | µs 🔳 VB | W 300 kH: | z M00 | e Auto FF | | | |
| | 20 dBm | | | | | | M1[1] | | 2.48 | 2.42 dBm 003540 GHz |
| | 10 dBm | | | - | M1 | - | M2[1] | í. | 2.48 | -53.30 dBm 350000 GHz |
| | 0 dBm | | | - | T | | - | _ | | - |
| | -10 dBm | _ | | - | - | - | | | | |
| | -20 dBm 0 | 1 -17.580 | dBm | - | | | _ | | | - |
| | -30 dBm | | | - | | - | _ | | | - |
| GFSK/HCH/No Hop | -40 dBm | | | | 1 | | | | | - |
| | -SO.d&mmm | Houghtenature | where makest wood | appendiated | 1 here | attainate | M4 | Mana Ma | - | ANT A POWER AND AND A |
| | -60 dBm | | | | | | | | | |
| | -70 dBm | | | _ | | | _ | | | - |
| | CF 2.4835 C | Hz | · · · · · | | 8001 | pts | | | Spa | n 60.0 MHz |
| | Marker Type Ref M1 | Trc 1 | X-value 2.4800354 G | | -value 2.42 dB | | unction | Fun | ction Resu | It |
| | M2 M3 | 1 | 2.4835 G 2.5 G | Hz | -53.30 dB | m | | | | |
| | M4 | 1 | 2.490955 G | | -48.84 dB | | | | | |
| | Date:21.0CT.20 | 021 02:56: | 03 | | | | | | | |
| | Spectrum | | | | | | | | | |
| | Ref Level | 25.00 dBr 30 df | | | W 100 kH: W 300 kH: | | e Auto FF | т | | |
| | 1Pk View 20 dBm | | | | 1 | | M1[1] | | - | 2.74 dBm |
| | 10 dBm | | | | | | M2[1] | | | 731500 GHz -51.54 dBm |
| | IP dBmn n nn | 0.0.0.0.0 | AAAAAA | AAAAA | лл | | 1 | 1 | 2.4 | 835000 GHz |
| | AGRIMA | nnar | ANANA. | $M_{\rm M}$ | | | | | | |
| | -20 dBm | 1 -17.260 | dBm | | | | _ | | | |
| | -30 dBm | | | | | | | | | |
| GFSK/HCH/Hop | -40 dBm | | | | 4 | | | | | |
| o | | | | | 4 M | 2 march a | | M3 | M4 | |
| | -50 dBm | | | | | | | | | |
| | | | | | | | | | | |
| | | | | | 600 | pts | | | Spa | n 60.0 MHz |
| | -70 dBm CF 2.4835 0 | Hz | | | | | | | | |
| | CF 2.4835 0 Marker | | X-value | 1 . | | Fi | inction | Fun | tion Resu | lt l |
| | CF 2.4835 C Marker Type Ref M1 | Trc 1 | X-value 2.47315 G 2.4835 G | Hz | ′-value 2.74 dB | m | unction | Fun | ction Resu | it I |
| | CF 2.4835 C Marker Type Ref | Trc | | Hz Hz Hz | -value | m m m | unction | Fun | ction Resu | lt |



| | Spectrun | n | | | | | | | | | |
|-------------------|--|---|---|--------------------|--------------------------|--------------|----------------|-----|-----------------|-----------------|---|
| | | 1 25.00 dBn | | | RBW 100 kH: | | | | | | |
| | Att 1Pk View | 30 di | B SWT | 151.7 µs 🖷 | VBW 300 kH: | Mod | e Auto | FFT | | | |
| | 20 dBm- | | | | | | M1[1] | | | 2.40 | -4.15 dBm |
| | 10 dBm | | | | | | M2[1] | | | - | 51.20 dBm |
| | | | | | | | 1 | | | 2.40 | 100000 GHz |
| | 0 dBm | | | | | | | - | K | | |
| | -10 dBm | | | | + + | | | - | | - | |
| | -20 d8m | - | | - | | | - | _ | | - | - |
| | -30 d8m | D1 -24.150 | dBm | | | | | | | | |
| π/4DQPSK/LCH/No | -40 dBm | | | | | | | | 1 | | |
| Нор | - | | MS | - | a standard | | MB | ME | | | |
| Пор | 159 dame | and presented | and a set of the second | animan frie | manuscription in the | a the states | John Jan | | Mary strain | a land for the | NORTH MARKENING |
| | -60 dBm | | | | | | - | _ | | - | |
| | -70 dBm | | | | | | - | | | | |
| | Start 2.31 | GHz | | - | 8001 | ts | - | _ | | Stop | 2.441 GHz |
| | Marker | | | | | | | | | | |
| | Type Re M1 | f Trc | 2.4020 | e 24 GHz | -4.15 dBm | | ction | - | Fun | ction Result | |
| | M2 | 1 | 2 | 2.4 GHz | -51.20 dBm | | | | | | |
| | M3 | 1 | | 39 GHz 31 GHz | -50.99 dBm -51.87 dBm | | | + | | | |
| | M4 | | | | | | | | | | |
| | M4 M5 | 1 | 2.3443 | 22 GHz | -48.18 dBm | | | 1 | | | |
| | | 1 | 2.3443 | | | | | | | | |
| | M5 Date:21.0CT | 1 | 2.3443 | 9.84 dB | | 2 | e Auto | FFT | | | |
| | M5 Date:21.0CT. Spectrum Ref Leve | 1 2021 03:00:0 | 2.3443 | 9.84 dB | -48.18 dBm | Mod | | FFT | | | |
| | M5 Date: 21.0 CT. Spectrum Ref Leve | 1 2021 03:00:0 | 2.3443 | 9.84 dB | -48.18 dBm | Mod | e Auto | FFT | | 2,4 | -1.10 dBm |
| | M5 Date: 21.0CT Spectrum Ref Leve Att 1Pk View | 1 2021 03:00:0 | 2.3443 | 9.84 dB | -48.18 dBm | Mod | | FFT | | - | -1.10 dBn 30190 GH; 50.28 dBn |
| | M5 Date: 21.0 CT. Spectrum Ref Leve Att 1Pk View 20 dBm 10 dBm | 1 2021 03:00:0 | 2.3443 | 9.84 dB | -48.18 dBm | Mod | M1[1] | | | 2.4 | -1.10 dBm 30190 GH2 50.28 dBm 00000 GH2 M1 |
| | M5 Date: 21.0CT. Spectrum Ref Leve Att 1Pk View 20 dBm | 1 2021 03:00:0 | 2.3443 | 9.84 dB | -48.18 dBm | Mod | M1[1] | | antibili birash | 2.4 | -1.10 dBm 30190 GH; 50.28 dBm 00000 GH; M1 |
| | M5 Date: 21.0 CT. Spectrum Ref Leve Att 1Pk View 20 dBm 10 dBm | 1 2021 03:00:0 | 2.3443 | 9.84 dB | -48.18 dBm | Mod | M1[1] | | างให้แป้งเกา | - | -1.10 dBm 30190 GH; 50.28 dBm 00000 GH; M1 |
| | MS Date: 21.0CT. Spectrum Ref Leve Att 1Pk View 20 dBm 10 dBm 0 dBm | 1 2021 03:00 x 1 25:00 dBn 30 dł | 2.3443 | 9.84 dB | -48.18 dBm | Mod | M1[1] | | างเป็ญปังกา | 2.4 | -1.10 dBm 30190 GH; 50.28 dBm 00000 GH; M1 |
| | MS Date: 21.0 CT. Spectrum Ref Leve Att 10 dBm 10 dBm -10 dBm -20 dBm | 1 2021 03:00:0 | 2.3443 | 9.84 dB | -48.18 dBm | Mod | M1[1] | | างระหัน | 2.4 | -1.10 dBm 30190 GH2 50.28 dBm 00000 GH2 M1 |
| | MS Date: 21.0 CT. Spectrum Ref Leve Att 10 dBm 10 dBm -10 dBm | 1 2021 03:00 x 1 25:00 dBn 30 dł | 2.3443 | 9.84 dB | -48.18 dBm | Mod | M1[1] | | างให้ปัญหักงา | 2.4 | -1.10 dBm 30190 GH2 50.28 dBm 00000 GH2 M1 |
| 1/4DQPSK/I CH/Hop | MS Date: 21.0 CT. Spectrum Ref Leve Att 10 dBm 10 dBm -10 dBm -20 dBm | 1 2021 03:00 x 1 25:00 dBn 30 dł | 2.3443 | 9.84 dB | -48.18 dBm | Mod | M1[1] M2[1] | | างให้สุปากา | 2.4 | -1.10 dBm 30190 GH2 50.28 dBm 00000 GH2 M1 |
| r/4DQPSK/LCH/Hop | MS Date: 21.0 CT. Spectrum Ref Leve Att 10 dBm 10 dBm -10 dBm -20 dBm -30 dBm -40 dBm | 1 2021 03:00 x 1 25:00 dBn 30 dł | 2.3443 | 9.84 dB | -48.18 dBm | Mod | M1[1] | | างไฟไมไปเกา | 2.4 | -1.10 dBm 30190 GH; 50.28 dBm 00000 GH; M1 |
| τ/4DQPSK/LCH/Hop | MS Date: 21.0 CT. Spectrum Ref Leve Att 10 dBm 10 dBm 10 dBm -10 dBm -20 dBm -30 dBm | 1 2021 03:00 x 1 25:00 dBn 30 dł | 2.3443 | 9.84 dB | -48.18 dBm | Mod | M1[1] M2[1] | | ารระบบ | 2.4 | -1.10 dBm 30190 GH; 50.28 dBm 00000 GH; M1 |
| τ/4DQPSK/LCH/Hop | MS Date: 21.0 CT. Spectrum Ref Leve Att 10 dBm 10 dBm -10 dBm -20 dBm -30 dBm -40 dBm -60 dBm | 1 2021 03:00 x 1 25:00 dBn 30 dł | 2.3443 | 9.84 dB | -48.18 dBm | Mod | M1[1] M2[1] | | างให้ไม่ได้เกา | 2.4 | -1.10 dBm 30190 GH; 50.28 dBm 00000 GH; M1 |
| τ/4DQPSK/LCH/Hop | MS Date: 21.0 CT. Spectrum Ref Leve Att 10 dBm 10 dBm -10 dBm -10 dBm -30 dBm -30 dBm -40 dBm -40 dBm -70 dBm | 1 2021 03:00:0 1 25:00 dBn 30 dt | 2.3443 | 9.84 dB | -48.18 dBm | Mod | M1[1] M2[1] | | างให้ไม่ได้เกา | 2.4 | -1.10 dBn 30190 GH2 50.28 dBn 00000 GH2 M1 MMMMMM |
| τ/4DQPSK/LCH/Hop | MS Date: 21.0 CT. Spectrum Ref Leve Att 10 dBm 10 dBm -10 dBm -20 dBm -30 dBm -40 dBm -60 dBm -70 dBm Start 2.31 | 1 2021 03:00:0 1 25:00 dBn 30 dt | 2.3443 | 9.84 dB | -48.18 dBm | Mod | M1[1] M2[1] | | างให้สุปากา | 2.4 | -1.10 dBm 30190 GH; 50.28 dBm 00000 GH; M1 |
| τ/4DQPSK/LCH/Hop | MS Date: 21.0 CT. Spectrum Ref Leve Att 1Pk View 20 dBm 10 dBm 0 dBm -10 dBm -20 dBm -30 dBm -30 dBm -40 dBm -50 dBm -70 dBm -70 dBm Start 2.31 Marker Type Re | 1 2021 03:00 x 1 25:00 dBn 30 df 201 -21:100 | 2.3443 | 9.84 dB | -48.18 dBm | ts | M1[1] M2[1] | | | 2.4 | -1.10 dBm 30190 GH2 50.28 dBm 000000 GH2 M1 M1 M1 M2 M2 M2 M2 M2 M2 M2 M2 M2 M2 M2 M2 M2 |
| τ/4DQPSK/LCH/Hop | MS Date: 21.0 CT. Spectrum Ref Leve Att 91Pk View 20 dBm 10 dBm 0 dBm -10 dBm -30 dBm -30 dBm -30 dBm -70 dBm Stort 2.31 Marker Type Re M1 | 1 2021 03:00 x 1 25.00 dBn 30 dt 701 -21.100 GHz GHz | 2.3443 | 9.84 dB | -48.18 dBm | ts | M1[1] M2[1] | | | 2.4 WWWWWWWW | -1.10 dBm 30190 GH2 50.28 dBm 000000 GH2 M1 M1 M1 M2 M2 M2 M2 M2 M2 M2 M2 M2 M2 M2 M2 M2 |
| τ/4DQPSK/LCH/Hop | MS Date: 21.0 CT. Spectrum Ref Leve Att 1Pk View 20 dBm 10 dBm 0 dBm -10 dBm -20 dBm -30 dBm -30 dBm -40 dBm -50 dBm -70 dBm -70 dBm Start 2.31 Marker Type Re | 1 2021 03:00 x 1 25:00 dBm 30 df 201 -21:100 GHz f Trc | 2.3443 | 9.84 dB | -48.18 dBm | ts | M1[1] M2[1] | | | 2.4 WWWWWWWW | -1.10 dBm 30190 GH2 50.28 dBm 000000 GH2 M1 M1 M1 M2 M2 M2 M2 M2 M2 M2 M2 M2 M2 M2 M2 M2 |
| т/4DQPSK/LCH/Нор | MS Date: 21.0 CT. Spectrum Ref Leve Att 10 dBm 10 dBm -10 dBm -10 dBm -20 dBm -30 dBm -30 dBm -40 dBm -60 dBm -70 dBm Stort 2.31 Marker Type Re M1 M2 | 1 2021 03:00:0 1 25:00 dBn 30 df 201 -21:100 6Hz 6Hz 1 1 | 2.3443 09 a Offset 3 SWT dBm dBm x-value 2.430 2.2.2.2.2.2.2.2.2.2.2.2.2.2.2.2.2.2.2. | 9.84 dB 151.7 µs 1 | -48.18 dBm | | M1[1] M2[1] | | | 2.4 WWWWWWWW | -1.10 dBm 30190 GH2 50.28 dBm 000000 GH2 M1 M1 M1 M2 M2 M2 M2 M2 M2 M2 M2 M2 M2 M2 M2 M2 |



| | Spectrum | | | | | | |
|------------------|---|---|---|--|------------------------|-------|--|
| | Ref Level | 25.00 dBn 30 dB | | RBW 100 kHz VBW 300 kHz | Mode Auto FF | т | |
| | • 1Pk View | | 1 | 1 1 | M1[1] | | -1.59 dBm |
| | 20 dBm | | | | M2[1] | | 2.48002040 GHz -53.21 dBm |
| | 10 0.011 | | | MI | 1 | 1 1 | 2.48350000 GHz |
| | 0 dBm | | | Å | | | |
| | -10 dBm | | | | | - | |
| | -20 dBm | | | | | | |
| | | D1 -21.590 | dBm | | | | |
| π/4DQPSK/HCH/No | -30 dBm | | | | | | |
| Нор | -40 dBm | | | | | - | |
| Пор | RQ-dRP-com | A Short State State | Handred Manuschurson | and hally | Contraction de Michard | M3 | and the man the state of the st |
| | | | | 1 | | | |
| | -60 dBm | | | | | | |
| | -70 dBm | | | | | | |
| | CF 2.4835 | GHz | | 8001 p | ts | | Span 60.0 MHz |
| | Marker Type Ref | Trc | X-value | Y-value | Function | Func | tion Result |
| | M1 M2 | 1 | 2.4800204 GHz 2.4835 GHz | -1.59 dBm -53.21 dBm | | 1 | |
| | M3 | 1 | 2.5 GHz | -50.18 dBm | | | |
| | | | | | | | |
| | M4 Date:21.0CT.2 Spectrum | _ | 2.5071175 GHz | -48.52 dBm | | | |
| | Date: 21.0CT.2 Spectrum Ref Level | 2021 03:07:4 | 12 n Offset 9.80 dB # | | Mode Auto FF | T | (m) A |
| | Date: 21.0CT.2 Spectrum Ref Level Att 1Pk View | 2021 03:07:4 | 12 n Offset 9.80 dB # | RBW 100 kHz | Mode Auto FF M1[1] | T | |
| | Date: 21.0CT.2 Spectrum Ref Level | 2021 03:07:4 | 12 n Offset 9.80 dB # | RBW 100 kHz | M1[1] | T | 0.33 dBm 2.4791500 GHz |
| | Date: 21.0CT.2 Spectrum Ref Level Att 1Pk View | 2021 03:07:4 | 12 n Offset 9.80 dB # | RBW 100 kHz VBW 300 kHz | | т | 0.33 dBm 2.4791500 GHz -51.80 dBm |
| | Date: 21.0 CT 2 Spectrum Ref Level Att 1Pk View 20 dBm 10 dBm | 2021 03:07:4 25.00 dBm 30 df | 12 n Offset 9.80 dB 8 SWT 75.8 μs | RBW 100 kHz VBW 300 kHz | M1[1] | т | 0.33 dBm 2.4791500 GHz -51.80 dBm |
| | Date: 21.0 CT 2 Spectrum Ref Level Att 1Pk View 20 dBm 10 dBm | 2021 03:07:4 | 12 0 Offset 9.80 dB 8 SWT 75.8 μs | RBW 100 kHz VBW 300 kHz | M1[1] | T | 0.33 dBm 2.4791500 GHz -51.80 dBm |
| | Date: 21.0CT.2 Spectrum Ref Level Att 10 dBm 10 dBm 10 dBm -10 dBm | 2021 03:07:4 25.00 dBm 30 df | 12 n Offset 9.80 dB 8 SWT 75.8 µs | RBW 100 kHz VBW 300 kHz | M1[1] | T | 0.33 dBm 2.4791500 GHz -51.80 dBm |
| | Date: 21.0CT.2 Spectrum Ref Level Att 10 dBm 10 dBm 10 dBm -10 dBm | 25.00 dBm 30 df | 12 n Offset 9.80 dB 8 SWT 75.8 µs | RBW 100 kHz VBW 300 kHz | M1[1] | T | 0.33 dBm 2.4791500 GHz -51.80 dBm |
| r/4DQPSK/HCH/Hop | Date: 21.0 CT 2 Spectrum Ref Level Att 1Pk View 20 dBm 10 dBm 0 dBm -10 dBm -20 dBm | 25.00 dBm 30 df | 12 n Offset 9.80 dB 8 SWT 75.8 µs | RBW 100 kHz VBW 300 kHz | M1[1] | | 0.33 dBm 2.4791500 GHz -51.80 dBm |
| r/4DQPSK/HCH/Hop | Date: 21.0CT.2 Spectrum Ref Level Att 1Pk View 20 dBm 10 dBm 0 dBm -10 dBm -20 dBm -30 dBm | 25.00 dBm 30 df | 12 n Offset 9.80 dB 8 SWT 75.8 µs | RBW 100 kHz VBW 300 kHz | M1[1] | T | 0.33 dBm 2.4791500 GHz -51.80 dBm |
| т/4DQPSK/HCH/Hop | Date: 21.0 CT 2 Spectrum Ref Level Att 1Pk View 20 dBm 10 dBm 0 dBm -10 dBm -30 dBm -40 dBm | 25.00 dBm 30 df | 12 n Offset 9.80 dB 8 SWT 75.8 µs | M1 | M1[1] | | 0.33 dBm 2.4791500 GHz -51.80 dBm 2.4835000 GHz |
| т/4DQPSK/HCH/Hop | Date: 21.0CT.2 Spectrum Ref Level Att 10 dBm 10 dBm 0 dBm -20 dBm -30 dBm -40 dBm -50 dBm | 25.00 dBm 30 df | 12 n Offset 9.80 dB 8 SWT 75.8 µs | M1 | M1[1] | | 0.33 dBm 2.4791500 GHz -51.80 dBm |
| τ/4DQPSK/HCH/Hop | Date: 21.0 CT 2 Spectrum Ref Level Att 1 Pk View 20 dBm 10 dBm 0 dBm -10 dBm -30 dBm -30 dBm -50 dBm -60 dBm | 25.00 dBm 30 df | 12 n Offset 9.80 dB 8 SWT 75.8 µs | M1 | M1[1] | | 0.33 dBm 2.4791500 GHz -51.80 dBm |
| τ/4DQPSK/HCH/Hop | Date: 21.0 CT 2 Spectrum Ref Level Att 10 dBm 10 dBm 0 dBm 0 dBm -10 dBm -20 dBm -30 dBm -30 dBm -50 dBm -60 dBm -70 dBm CF 2.4835 Marker | 25.00 dBm 30 dB 25.00 dBm 30 dB 01 -19.670 GHz | 12 n Offset 9.80 dB swr 75.8 μs dBm | M1 M1 M1 M2 600 pt | M1[1] M2[1] | M4 M3 | 0.33 dBm 2.4791500 GHz -51.80 dBm 2.4835000 GHz |
| τ/4DQPSK/HCH/Hop | Date: 21.0 CT 2 Spectrum Ref Level Att 10 dBm 10 dBm 10 dBm 0 dBm -10 dBm -30 dBm -30 dBm -40 dBm -50 dBm -60 dBm -70 dBm CF 2.4835 | 25.00 dBm 30 dB 30 dB 901 -19.670 GHz | 12 n Offset 9.80 dB swr 75.8 µs dBm dBm | RBW 100 kHz VBW 300 kHz | M1[1] | M4 M3 | 0.33 dBm 2.4791500 GHz -51.80 dBm 2.4835000 GHz |
| т/4DQPSK/HCH/Hop | Date: 21.0 CT 2 Spectrum Ref Level Att 10 k View 20 dBm 10 dBm 0 dBm 0 dBm -10 dBm -20 dBm -30 dBm -30 dBm -40 dBm -50 dBm -60 dBm -70 dBm CF 2.4835 Marker Type Ref M1 M2 | 25.00 dBm 30 dt 901 -19.670 GHz 1 1 | 12 n Offset 9.80 dB в 8 SWT 75.8 µs в марри 75.8 µs в | RBW 100 kHz VBW 300 kHz M1 WM 600 pt Y-value 0.33 dBm -51.80 dBm | M1[1] M2[1] | M4 M3 | 0.33 dBm 2.4791500 GHz -51.80 dBm 2.4835000 GHz |
| r/4DQPSK/HCH/Hop | Date: 21.0 CT 2 Spectrum Ref Level Att 10 dBm 10 dBm 0 dBm 0 dBm -10 dBm -20 dBm -30 dBm -30 dBm -50 dBm -60 dBm -70 dBm CF 2.4835 Marker Type Ref M1 | 25.00 dBm 30 df 01 -19.670 GHz | 12 n Offset 9.80 dB s SWT 75.8 µs dBm dBm dBm z,47915 GHz | RBW 100 kHz VBW 300 kHz M1 WM1 WM1 WM1 M1 WM1 M1 WM2 600 pt Y-value 0.33 dBm | M1[1] M2[1] | M4 M3 | 0.33 dBm 2.4791500 GHz -51.80 dBm 2.4835000 GHz |



| | Spectrun | 11 | | | | | | | | | |
|------------------|--|--|--|---|----------------------------|------------------------|--------------|----|-------------|---|--|
| | Att | 1 25.00 dBn 30 df | | | RBW 100 kH: VBW 300 kH: | | Auto Fi | FT | | | |
| | 20 dBm | | | | 1 | M | 1[1] | | | | -4.16 dBm |
| | 10 dBm | | | | | M | 2[1] | | | - | 20900 GHz 50.92 dBm 00000 GHz |
| | 0 dBm- | | | | | | | M | 1 | | oooo an |
| | -10 dBm | | | | | | | 1 | | | |
| | -20 d8m | | | | | | | - | | | |
| | -30 dBm | D1 -24.160 | dBm | | | | | - | | | |
| 3DPSK/LCH/No Hop | -40 dBm | | | | - | _ | | 1 | - | | |
| | 192 demon | An Interior | Majar | whendering | - | | M3 | MP | Man genance | - | under an and |
| | -60 dBm | | | | | | | - | - | | |
| | -70 dBm | | - | | | | | - | | | |
| | Start 2.31 | GHz | | | 8001 (| ots | | | | Stop 2 | 2.441 GHz |
| | Marker Type Re | f Trc | X-value | , 1 | Y-value | Funct | tion | | Fund | tion Result | 1 |
| | M1 M2 | 1 | 2.402 | 09 GHz | -4.16 dBm -50.92 dBm | | | - | | | |
| | IVIZ | | | 39 GHz | -51.12 dBm | | - | | | | |
| | M3 | 1 | | | | | | | | | |
| | M4 M5 Date:21.0CT | 1 1 .2021 03:11:2 | 2.3 2.31915 | 31 GHz 36 GHz | -51.18 dBm -47.36 dBm | | | | | | |
| | M4 M5 Date:21.0CT Spectrum Ref Leve | 1 2021 03:112 | 2.31915 24 n Offset | 31 GHz 36 GHz 9.84 dB | | 2 | Auto Fi | FT | | | |
| | M4 M5 Date:21.0CT Spectrum Ref Leve | 1 2021 03:112 | 2.31915 24 n Offset | 31 GHz 36 GHz 9.84 dB | -47.36 dBm | 2 Mode | Auto Fi | FT | | | -0.73 dBm |
| | M4 M5 Date: 21.0CT Spectrum Ref Leve Att 1Pk View | 1 2021 03:112 | 2.31915 24 n Offset | 31 GHz 36 GHz 9.84 dB | -47.36 dBm | Mode M | | FT | | 2.4 | -0.73 dBm 38050 GHz 47.84 dBm |
| | M4 M5 Date: 21.0CT Spectrum Ref Leve Att 1Pk View 20 dBm 10 dBm | 1 2021 03:112 | 2.31915 24 n Offset | 31 GHz 36 GHz 9.84 dB | -47.36 dBm | Mode M | 1[1] | 1 | | 2.4 | -0.73 dBm 38050 GHz 47,84 dBm 00000 GHz M1 |
| | M4 M5 Date: 21.0 CT Spectrum Ref Leve Att 1Pk View 20 dBm 10 dBm 0 dBm | 1 2021 03:112 | 2.31915 24 n Offset | 31 GHz 36 GHz 9.84 dB | -47.36 dBm | Mode M | 1[1] | 1 | unquuq | 2.4 | -0.73 dBm 38050 GHz 47,84 dBm 00000 GHz M1 |
| | M4 M5 Date:21.0CT Spectrum Ref Leve Att 1Pk View 20 dBm 10 dBm 0 dBm -10 dBm | 1 2021 03:112 n 25.00 dBn 30 dt | 2: 2.31915 | 31 GHz 36 GHz 9.84 dB | -47.36 dBm | Mode M | 1[1] | 1 | unrullus | 2.4 | -0.73 dBm 38050 GHz 47,84 dBm 00000 GHz M1 |
| | M4 M5 Date: 21.0 CT Spectrum Ref Leve Att 1Pk View 20 dBm 10 dBm 0 dBm -10 dBm -20 dBm | 1 2021 03:112 | 2: 2.31915 | 31 GHz 36 GHz 9.84 dB | -47.36 dBm | Mode M | 1[1] | 1 | unglig | 2.4 | -0.73 dBm 38050 GHz 47,84 dBm 00000 GHz M1 |
| | M4 M5 Date:21.0CT Spectrum Ref Leve Att 1Pk View 20 dBm 10 dBm 0 dBm -10 dBm | 1 2021 03:112 n 25.00 dBn 30 dt | 2: 2.31915 | 31 GHz 36 GHz 9.84 dB | -47.36 dBm | Mode M | 1[1] | 1 | untillia | 2.4 | -0.73 dBm 38050 GHz 47,84 dBm 00000 GHz M1 |
| 8DPSK/LCH/Hop | M4 M5 Date: 21.0 CT Spectrum Ref Leve Att 1Pk View 20 dBm 10 dBm 0 dBm -10 dBm -20 dBm | 1 2021 03:112 n 25.00 dBn 30 dt | 2: 2.31915: 24 Offset SWT 1 dBm MS | 31 GHz 36 GHz 9.84 dB | -47.36 dBm | Mode M | 1[1] 2[1] | 1 | unzun | 2.4 | -0.73 dBm 38050 GHz 47,84 dBm 00000 GHz M1 |
| 8DPSK/LCH/Hop | M4 M5 Date: 21.0CT Spectrum Ref Leve Att 1Pk View 20 dBm 10 dBm 10 dBm -10 dBm -30 dBm | 1 2021 03:112 n 25.00 dBn 30 dt | 2: 2:31915: 24 a offset a swr 1 | 31 GHz 36 GHz 9.84 dB | -47.36 dBm | Mode M | 1[1] | | unerillin | 2.4 | -0.73 dBm 38050 GHz 47,84 dBm 00000 GHz M1 |
| 8DPSK/LCH/Hop | M4 M5 Date: 21.0 CT Spectrum Ref Leve Att 10 dBm 10 dBm 0 dBm -10 dBm -20 dBm -30 dBm -40 dBm | 1 2021 03:112 n 25.00 dBn 30 dt | 2: 2.31915: 24 Offset SWT 1 dBm MS | 31 GHz 36 GHz 9.84 dB | -47.36 dBm | Mode M | 1[1] 2[1] | | unzulia | 2.4 | 38050 GHz 47.84 dBm 00000 GHz M1 |
| 8DPSK/LCH/Hop | M4 M5 Date: 21.0 CT Spectrum Ref Leve Att 10 dBm 10 dBm 10 dBm -10 dBm -20 dBm -30 dBm -30 dBm | 1 2021 03:112 n 25.00 dBn 30 dt | 2: 2.31915: 24 Offset SWT 1 dBm MS | 31 GHz 36 GHz 9.84 dB | -47.36 dBm | Mode M | 1[1] 2[1] | | ungung | 2.4 | -0.73 dBm 38050 GHz 47,84 dBm 00000 GHz M1 |
| 8DPSK/LCH/Hop | M4 M5 Date: 21.0 CT Spectrum Ref Leve Att 1Pk View 20 dBm 10 dBm 0 dBm -10 dBm -30 dBm -30 dBm -60 dBm -70 dBm Stort 2.31 | 1 2021 03:112 n 1 25.00 dBn 30 df | 2: 2.31915: 24 Offset SWT 1 dBm MS | 31 GHz 36 GHz 9.84 dB | -47.36 dBm | Mode Mi Mi | 1[1] 2[1] | | undfilligh | 2.4 2.4 Willmann | -0.73 dBm 38050 GHz 47,84 dBm 00000 GHz M1 |
| 8DPSK/LCH/Hop | M4 M5 Date: 21.0 CT Spectrum Ref Leve Att 1Pk View 20 dBm 10 dBm 0 dBm -20 dBm -30 dBm -40 dBm -60 dBm -70 dBm Start 2.31 | 1 2021 03:11:2 n 25.00 dBn 30 di | 2: 2:31915: 24 a Offset a SWT 1 dBm: dBm: | 9.84 dB | -47.36 dBm | Mode M M | 1[1] 2[1] | | | 2.4 2.4 Willion My Mile Stop 2 | -0.73 dBm 38050 GHz 47.84 dBm 00000 GHz M1 |
| 8DPSK/LCH/Hop | M4 M5 Date: 21.0 CT Spectrum Ref Leve Att 10 dBm 10 dBm 0 dBm -10 dBm -20 dBm -30 dBm -40 dBm -50 dBm -60 dBm -70 dBm Start 2.31 Marker Type Re M1 | 1 1 2021 03:112 | 2: 2.31915: 24 a Offset 3 SWT 1 dBm dBm | 9.84 dB | -47.36 dBm | Mode Mi Mi ts | 1[1] 2[1] | | | 2.4 2.4 Willmann | -0.73 dBm 38050 GHz 47.84 dBm 00000 GHz M1 |
| 8DPSK/LCH/Hop | M4 M5 Date: 21.0 CT Spectrum Ref Leve Att 10 dBm 10 dBm 10 dBm -10 dBm -10 dBm -30 dBm -30 dBm -30 dBm -40 dBm -40 dBm -70 dBm -70 dBm -70 dBm -70 dBm -70 dBm -70 dBm -70 dBm | 1 2021 03:11:2 1 25.00 dBn 30 dB 1 25.00 dBn 1 25.00 dBn 1 20.730 1 20.750 1 20.750 1 20.750 1 20.750 1 20.750 1 20.750 1 20.750 1 2 | 2:31915 2:4 a Offset a SWT 1 dBm dBm x-value 2:4388 2:4388 2:4388 2:4388 2:4388 2:4388 2:4388 2:4388 2:4388 2:4388 2:4388 2:4388 2:4388 2:4388 2:4388 2:4388 2:4388 2:4388 2:4388 2:43888 2:43888 2:43888 2:43888 2:43888 2:43888 2:43888 2:43888 2:43888 2:43888 2:43888 2:43888 2:43888 2:43888 2:4388888 2:438888 2:4388888 2:43888888888888888888888888888888888888 | 9.84 dB | -47.36 dBm | Mode M M M | 1[1] 2[1] | | | 2.4 2.4 Willion My Mile Stop 2 | -0.73 dBm 38050 GHz 47.84 dBm 00000 GHz M1 MU |
| 8DPSK/LCH/Hop | M4 M5 Date: 21.0 CT Spectrum Ref Leve Att 1Pk View 20 dBm 10 dBm 0 dBm -10 dBm -20 dBm -30 dBm -40 dBm -50 dBm -60 dBm -70 dBm Stort 2.31 Marker Type M1 | 1 1 2021 03:112 | 2: 2.31915 24 3 SWT 1 4 4 4 6 5 SWT 1 4 6 6 8 8 8 7 7 7 8 7 7 8 7 7 8 7 7 8 7 7 8 7 | 9.84 dB 451.7 µs 4 9.84 dB 451.7 µs 4 551.7 | -47.36 dBm | 2 Mode M | 1[1] 2[1] | | | 2.4 2.4 Willion My Mile Stop 2 | -0.73 dBm 38050 GHz 47.84 dBm 00000 GHz M1 |



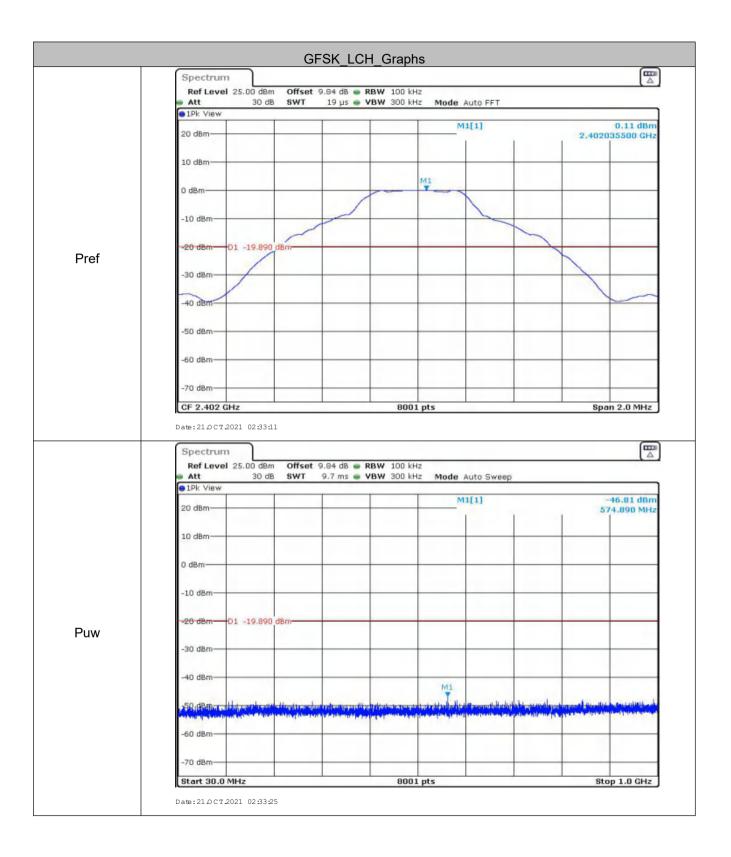
| | Spectrum | | | | | | | | | m |
|------------------|--|--|---|---|--|---|----------------|-------------|-----------|--|
| | | 1 25.00 dB 30 d | | | | | | | | |
| | 1Pk View | 30 0 | IB SWT 75.8 µs | e VBW 3 | | Mode Auto | FFI | | | - |
| | 20 dBm | | | | | M1[1] | | | 2.479 | -1.65 dBm 95290 GHz |
| | 10 dBm | | | _ | _ | M2[1] | | | - | 52.96 dBm 50000 GHz |
| | a dan | | | MI | | | | | 21100 | |
| | 0 dBm | | | A | | | | | | |
| | -10 dBm | | | | | | | | | |
| | -20 dBm | D1 -21.65 | 0 dBm | | _ | | | - | | |
| | -30 dBm | | | _ | - | | | _ | | |
| BDPSK/HCH/No Hop | -40 dBm | | | | | | - | | | |
| | | | | 1 | 1 | | M4 | M3 | | |
| | -150,dippopra | and shall be a state of the second | and history and a larger to | petholity | - | when the state of | and the second | - Annalis | montente | and the second second |
| | -60 dBm | | | - | - | | | - | | |
| | -70 dBm | | | _ | | | | - | | |
| | CF 2.4835 | GHz | | _ | 8001 pt | s | | | Span | 60.0 MHz |
| | Marker Type Re | f Trc | X-value | Y-va | lue | Function | 1 | Functio | on Result | |
| | M1 | 1 | 2.4799529 GHz 2.4835 GHz | -1. | 65 dBm 96 dBm | | | | | |
| | M2 | | | | | | | | | |
| | M2 M3 | 1 | 2.5 GHz | | 44 dBm | | - | | | |
| | M3 M4 Date:21.0CT. | 1 2021 03:18 | 2.5 GHz 2.4930925 GHz 37 | -47. | 34 dBm | | | | | |
| | M3 M4 Date: 21.0 CT. Spectrum Ref Leve Att | 2021 03:18 | 2.5 GHz 2.4930925 GHz 37 m Offset 9.80 dP | -47. | 34 dBm 00 kHz | Mode Auto | FFT | | | (mail the second |
| | M3 M4 Date: 21.0CT. Spectrum Ref Leve Att 1Pk View | 1 2021 03:18 | 2.5 GHz 2.4930925 GHz 37 m Offset 9.80 dP | -47. | 34 dBm 00 kHz | Mode Auto | FFT | | | 0.32 dBm |
| | M3 M4 Date: 21.0CT. Spectrum Ref Leve Att 1Pk View 20 dBm | 1 2021 03:18 | 2.5 GHz 2.4930925 GHz 37 m Offset 9.80 dP | -47. | 34 dBm 00 kHz | | FFT | | - | 0.32 dBm 81500 GHz 51.45 dBm |
| | M3 M4 Date: 21.0CT. Spectrum Ref Leve Att 1Pk View | 1 2021 03:18 1 25.00 dB 30 d | 2.5 GHz 2.4930925 GHz 37 m Offset 9.80 dE 8 SWT 75.8 μs | -47. | 34 dBm 00 kHz | M1[1] | FFT | Ī | - | 0.32 dBm 81500 GHz |
| | M3 M4 Date: 21.0 CT. Spectrum Ref Level Att 10 dBm 0 dBm | 1 2021 03:18 1 25.00 dB 30 d | 2.5 GHz 2.4930925 GHz 37 m Offset 9.80 dE 8 SWT 75.8 μs | -47. | 34 dBm 00 kHz | M1[1] | FFT | | - | 0.32 dBm 81500 GHz 51.45 dBm |
| | M3 M4 Date: 21.0 CT. Spectrum Ref Level Att 1Pk View 20 dBm- 10 dBm- | 1 2021 03:18 1 25.00 dB 30 d | 2.5 GHz 2.4930925 GHz 37 m Offset 9.80 dP | -47. | 34 dBm 00 kHz | M1[1] | FFT | | - | 0.32 dBm 81500 GHz 51.45 dBm |
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| | M3 M4 Date: 21.0 CT. Spectrum Ref Level Att 10 dBm 10 dBm 10 dBm -10 dBm -20 dBm | 1 2021 03:18 1 25.00 dB 30 d | 2.5 GHz 2.4930925 GHz 37 m Offset 9.90 dB fB SWT 75.8 µs | -47. | 34 dBm 00 kHz | M1[1] | FFT | | - | 0.32 dBm 81500 GHz 51.45 dBm |
| 8DPSK/HCH/Hop | M3 M4 Date: 21.0 CT. Spectrum Ref Leve Att 10 dBm 10 dBm 0 dBm -20 dBm -30 dBm | 1 2021 03:18 1 25.00 dB 30 d | 2.5 GHz 2.4930925 GHz 37 m Offset 9.90 dB fB SWT 75.8 µs | -47. | 34 dBm 00 kHz | M1[1] | FFT | | - | 0.32 dBm 81500 GHz 51.45 dBm |
| 8DPSK/HCH/Hop | M3 M4 Date: 21.0 CT. Spectrum Ref Level Att 10 dBm 10 dBm 10 dBm -10 dBm -20 dBm | 1 2021 03:18 1 25.00 dB 30 d | 2.5 GHz 2.4930925 GHz 37 m Offset 9.90 dB fB SWT 75.8 µs | -47. | 00 kHz 00 kHz | M1[1] | FFT | M3 | - | 0.32 dBm 81500 GHz 51.45 dBm |
| 8DPSK/HCH/Hop | M3 M4 Date: 21.0 CT. Spectrum Ref Leve Att 10 dBm 10 dBm 0 dBm -20 dBm -30 dBm | 1 2021 03:18 1 25.00 dB 30 d | 2.5 GHz 2.4930925 GHz 37 m Offset 9.90 dB fB SWT 75.8 µs | -47. | 34 dBm 00 kHz | M1[1] | FFT | Ma | - | 0.32 dBm 81500 GHz 51.45 dBm 35000 GHz |
| 8DPSK/HCH/Hop | M3 M4 Date: 21.0 CT. Spectrum Ref Level Att 10 dBm 10 dBm 10 dBm -10 dBm -20 dBm -30 dBm -40 dBm | 1 2021 03:18 1 25.00 dB 30 d | 2.5 GHz 2.4930925 GHz 37 m Offset 9.90 dB fB SWT 75.8 µs | -47. | 00 kHz 00 kHz | M1[1] | FFT | Ma | - | 0.32 dBm 81500 GHz 51.45 dBm 35000 GHz |
| 8DPSK/HCH/Hop | M3 M4 Date: 21.0 CT. Spectrum Ref Leve Att 1Pk View 20 dBm 10 dBm 0 dBm 0 dBm -20 dBm -30 dBm -40 dBm -50 dBm | 1 2021 03:18 1 25.00 dB 30 d | 2.5 GHz 2.4930925 GHz 37 m Offset 9.90 dB fB SWT 75.8 µs | -47. | 00 kHz 00 kHz | M1[1] | FFT | M3 | - | 0.32 dBm 81500 GHz 51.45 dBm 35000 GHz |
| 8DPSK/HCH/Hop | M3 M4 Date: 21.0 CT. Spectrum Ref Level Att 10 dBm 10 dBm 10 dBm 0 dBm -10 dBm -30 dBm -30 dBm -30 dBm -50 dBm -60 dBm | 1 1 2021 03:18 1 25.00 dB 30 d | 2.5 GHz 2.4930925 GHz 37 m Offset 9.90 dB fB SWT 75.8 µs | -47. | 00 kHz 00 kHz | M1[1] M2[1] | FFT | M3 | 2.48 | 0.32 dBm 81500 GHz 51.45 dBm 35000 GHz |
| 8DPSK/HCH/Hop | M3 M4 Date: 21.0 CT. Spectrum Ref Level Att ID dBm 10 dBm 0 dBm 10 dBm -10 dBm -20 dBm -30 dBm -40 dBm -50 dBm -60 dBm -70 dBm CF 2.4835 Marker | 1 1 2021 03:18 1 25.00 dB 30 d | 2.5 GHz 2.4930925 GHz 37 m Offset 9.80 dB 8 SWT 75.8 µs 0 dBm 0 dBm | -47. | 00 kHz 00 kHz 00 kHz 600 pts | M1[1] M2[1] | | of B. Color | 2,48 | 0.32 dBm 81500 GHz 51.45 dBm 35000 GHz |
| 8DPSK/HCH/Hop | M3 M4 Date: 21.0 CT. Spectrum Ref Level Att 1Pk View 20 dBm 10 dBm 0 dBm -10 dBm -20 dBm -30 dBm -40 dBm -50 dBm -60 dBm -70 dBm CF 2.4835 Marker Type M1 | 1 1 2021 03:18 1 25.00 dB 30 d | 2.5 GHz 2.4930925 GHz 37 m Offset 9.80 de B SWT 75.8 µs MMMMMMM 0 dBm 2.47815 GHz | -47. | 00 kHz 00 kHz 00 kHz 600 pts 100 32 dBm | M1[1] M2[1] | | of B. Color | 2.48 | 0.32 dBm 81500 GHz 51.45 dBm 35000 GHz |
| 8DPSK/HCH/Hop | M3 M4 Date: 21.0 CT. Spectrum Ref Level Att 1Pk View 20 dBm 10 dBm 0 dBm -10 dBm -20 dBm -30 dBm -40 dBm -50 dBm -60 dBm CF 2.4835 Marker Type | 1 1 2021 03:18 1 25.00 dB 30 d | 2.5 GHz 2.4930925 GHz 37 m Offset 9.80 dE 8 SWT 75.8 µs 2.4930925 GHz 37 0 dBm 0 dBm 0 dBm | -47. • RBW 1 • VBW 3 • VB | 00 kHz 00 kHz 00 kHz 600 pts | M1[1] M2[1] | | of B. Color | 2,48 | 0.32 dBm 81500 GHz 51.45 dBm 35000 GHz |



4.9 Spurious RF Conducted Emissions

| Test Requirement: | 47 CFR Part 15C Section 15.247 (d) |
|------------------------|---|
| Test Method: | ANSI C63.10:2013 |
| Test Setup: | Spectrum Analyzer E.U.T Non-Conducted Table Ground Reference Plane Remark: Offset=cable loss+ attenuation factor. |
| Limit: | In any 100 kHz bandwidth outside the frequency band in which the spread spectrum intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement. |
| Exploratory Test Mode: | Non-hopping transmitting with all kind of modulation and all kind of data type |
| Final Test Mode: | Through Pre-scan, find the DH5 of data type is the worst case of GFSK modulation type, 2-DH5 of data type is the worst case of π /4DQPSK modulation type, 3-DH5 of data type is the worst case of 8DPSK modulation type. |
| Test Results: | Pass |







| ●1Pk View | | | | _ | | Auto Sweep | | | |
|--|---------------------|--------------|-------------------|----------------------------------|--|----------------|---------------------|-----------------------|--|
| 20 dBm | | | | | | 12[1] | | 2. | -0.04 40160 43.86 |
| 10 dBm | | | | | | - | | 6. | 97300 |
| | MI | | | | | | | | |
| 0 dBm | T | | | | | | | | |
| -10 dBm | | | | | | | | | |
| | | | | | | | | | |
| -20 dBm-l | 01 -19.890 de | Bm | | | | - | | | |
| an dans | | | | | | | | | |
| -30 dBm | | | | | | | | | |
| -40 dBm | - | | | | M2 | | | | |
| | | the standard | the state | Indiatan a | du.m | | | | |
| 59 dBm- | ninger feldtige bit | | An and the second | Spill. | and the second s | and the second | and all all the lit | A STREET AND A STREET | and the second sec |
| -60 dBm | | | | | | | | | |
| -00 0611 | | | | | | | | | |
| -70 dBm | | | | | | | | | |
| Start 1.0 G | - | | | 1 | | | | | 12.0 G |
| Date: 21.0 CT.2 Spectrum Ref Level | 021 02:33:38 | | | 8001 RBW 100 kH ZBW 300 kH | z | Auto Sween | | Stop | 12.0 G |
| Date: 21.0 CT 2 | 021 02:33:38 | | | | z | Auto Sweep | | Stop | 12.0 G |
| Date: 21.0 CT.2 Spectrum Ref Level Att 1Pk View | 021 02:33:38 | | | RBW 100 kH | z z Mode | Auto Sweep | | | 44.46 d |
| Spectrum Ref Level Att | 021 02:33:38 | | | RBW 100 kH | z z Mode | | | | |
| Date: 21.0 CT.2 Spectrum Ref Level Att 1Pk View | 021 02:33:38 | | | RBW 100 kH | z z Mode | | | | 44.46 d |
| Date: 21.0 CT 2 Spectrum Ref Level Att 1Pk View 20 dBm 10 dBm | 021 02:33:38 | | | RBW 100 kH | z z Mode | | | | 44.46 c |
| Spectrum Ref Level Att 1Pk View 20 dBm | 021 02:33:38 | | | RBW 100 kH | z z Mode | | | | 44.46 d |
| Date: 21.0 CT 2 Spectrum Ref Level Att 1Pk View 20 dBm 10 dBm 0 dBm | 021 02:33:38 | | | RBW 100 kH | z z Mode | | | | 44.46 d |
| Date: 21.0 CT 2 Spectrum Ref Level Att 1Pk View 20 dBm 10 dBm | 021 02:33:38 | | | RBW 100 kH | z z Mode | | | | 44.46 d |
| Date: 21.0 CT 2 Spectrum Ref Level Att 1Pk View 20 dBm 10 dBm -10 dBm | 021 02:33:38 | SWT 1 | | RBW 100 kH | z z Mode | | | | 44.46 c |
| Date: 21.0 CT 2 Spectrum Ref Level Att 1Pk View 20 dBm 10 dBm -10 dBm -20 dBm | 25.00 dBm 30 dB | SWT 1 | | RBW 100 kH | z z Mode | | | | 44.46 c |
| Date: 21.0 CT 2 Spectrum Ref Level Att 1Pk View 20 dBm 10 dBm -10 dBm | 25.00 dBm 30 dB | SWT 1 | | RBW 100 kH | z z Mode | | | | 44.46 c |
| Date: 21.0 CT 2 Spectrum Ref Level Att 1Pk View 20 dBm 10 dBm -10 dBm -20 dBm -30 dBm | 25.00 dBm 30 dB | SWT 1 | | RBW 100 kH | z z Mode | | | | 44.46 c |
| Date: 21.0 CT 2 Spectrum Ref Level Att 1Pk View 20 dBm 10 dBm -10 dBm -20 dBm | 25.00 dBm 30 dB | SWT 1 | | RBW 100 kH | z z Mode | | | | 44.46 c |
| Date: 21.0 CT 2 Spectrum Ref Level Att 1Pk View 20 dBm 10 dBm -10 dBm -20 dBm -30 dBm | 25.00 dBm 30 dB | SWT 1 | | RBW 100 kH | z z Mode | | | 19, | 44.46 c |
| Date: 21.0 CT 2 Spectrum Ref Level Att 1Pk View 20 dBm 10 dBm -10 dBm -20 dBm -40 dBm | 25.00 dBm 30 dB | SWT 1 | | RBW 100 kH | z z Mode | | | 19, | 44.46 c |
| Date: 21.0 CT 2 Spectrum Ref Level Att 1Pk View 20 dBm 10 dBm -10 dBm -20 dBm -30 dBm | 25.00 dBm 30 dB | SWT 1 | | RBW 100 kH | z z Mode | | | 19, | 44.46 c |
| Date: 21.0 CT 2 Spectrum Ref Level Att 1Pk View 20 dBm 10 dBm -10 dBm -20 dBm -40 dBm | 25.00 dBm 30 dB | SWT 1 | | RBW 100 kH | z z Mode | | | 19, | 44.46 (|





| | Spectrum Ref Level | 25.00 dBm | | 9.80 dB 曼 RB | | | | | | |
|------|---|-------------------------------------|---------------|-----------------------------|--------------------------|-----------|-----------|---|-------|------------|
| | Att | 30 dB | SWT | 19 µs 👄 VE | 300 kHz | Mode | Auto FFT | | | |
| | 1Pk View | | | | | | 11[1] | | | 1.44 dBm |
| | 20 dBm | | | | | | urfr] | | 2.441 | 034250 GHz |
| | | | | | | | | | | |
| | 10 dBm | | | | | | - | - | | - |
| | | | | | | MI | | | | |
| | 0 dBm- | | | | | | | | | - |
| | | | | | | | ~ | | | |
| | -10 dBm | | 1 | | | | | | | |
| | -20 dBm | D1 -18.560 d | dBm | | | | | | | |
| Pref | -20 dBm- | 1 | | | | | | | 1 | |
| | -30 dBm | / | | | | | | | | - |
| | | | | | | | | | 1 | |
| | -40 dBm- | - | | | | | | - | | |
| | | | | | | | | | | |
| | -50 dBm | | | | | | - | - | | - |
| | | | | | | | | | | |
| | -60 dBm | | | | | | | + | | |
| | | | | | | | | | | |
| | -70 dBm | | | | | | | - | | |
| | | | | | | | | | 0 | 0.0.000 |
| | CF 2.441 G | | 9 | | 8001 | pts | | | sp | an 2.0 MHz |
| | Date: 21.0 CT. | 2021 02:52:59 | | 9.80 dB 👄 RB | | | | | Sp | |
| | Date: 21.0CT. Spectrum Ref Level | 2021 02:52:59 | | 9.80 dB 👄 RB 9.7 ms 🖷 VB | W 100 kHz | 2 | Auto Swee | p | Sp | |
| | Date: 21.0CT. Spectrum Ref Level | 2021 02:52:59 | Offset | 9.80 dB 👄 RE 9.7 ms 🖷 VE | W 100 kHz | z Mode | | p | | |
| | Date: 21.0CT. Spectrum Ref Level | 2021 02:52:59 | Offset | 9.80 dB 👄 RB 9.7 ms 🖷 VB | W 100 kHz | z Mode | Auto Swee | p | | |
| | Date: 21.0 CT. Spectrum Ref Level Att 1Pk View | 2021 02:52:59 | Offset | 9.80 dB 👄 RE 9.7 ms 🖷 VE | W 100 kHz | z Mode | | P | | -47.71 dBm |
| | Date: 21.0 CT. Spectrum Ref Level Att 1Pk View | 2021 02:52:59 | Offset | 9.80 dB 👄 RB 9.7 ms 🖷 VB | W 100 kHz | z Mode | | P | | -47.71 dBm |
| | Date: 21.0 CT. Spectrum Ref Level Att 1 Pk View 20 dBm 10 dBm | 2021 02:52:59 | Offset | 9.80 dB 👄 RE 9.7 ms 🖷 VE | W 100 kHz | z Mode | | P | | -47.71 dBm |
| | Date: 21.0 CT. Spectrum Ref Level Att 1Pk View 20 dBm | 2021 02:52:59 | Offset | 9.80 dB 👄 RE 9.7 ms 👄 VE | W 100 kHz | z Mode | | P | | -47.71 dBm |
| | Date: 21.0 CT. Spectrum Ref Level Att 1Pk View 20 dBm 10 dBm 0 dBm | 2021 02:52:59 | Offset | 9.80 dB 👄 RE 9.7 ms 👄 VE | W 100 kHz | z Mode | | p | | -47.71 dBm |
| | Date: 21.0 CT. Spectrum Ref Level Att 1 Pk View 20 dBm 10 dBm | 2021 02:52:59 | Offset | 9.80 dB 👄 RE 9.7 ms 🖷 VE | W 100 kHz | z Mode | | p | | -47.71 dBm |
| | Date: 21.0 CT.2 Spectrum Ref Level Att 1Pk View 20 dBm 10 dBm -10 dBm | 2021 02:52:59 | Offset SWT | 9.80 dB 👄 RB 9.7 ms 👄 VB | W 100 kHz | z Mode | | P | | -47.71 dBm |
| Puw | Date: 21.0 CT. Spectrum Ref Level Att 1Pk View 20 dBm 10 dBm 0 dBm -10 dBm | 2021 02:52:59 25.00 dBm 30 dB | Offset SWT | 9.80 dB 👄 RE 9.7 ms 👄 VE | W 100 kHz | z Mode | | P | | -47.71 dBm |
| Puw | Date: 21.0 CT.2 Spectrum Ref Level Att 1Pk View 20 dBm 10 dBm -10 dBm | 2021 02:52:59 25.00 dBm 30 dB | Offset SWT | 9.80 dB • RE 9.7 ms • VE | W 100 kHz | z Mode | | P | | -47.71 dBm |
| Puw | Date: 21.0 CT.2 Spectrum Ref Level Att 1Pk View 20 dBm 10 dBm -10 dBm -20 dBm | 2021 02:52:59 25.00 dBm 30 dB | Offset SWT | 9.80 dB - RE 9.7 ms - VE | W 100 kHz | z Mode | | P | | -47.71 dBm |
| Puw | Date: 21.0 CT.2 Spectrum Ref Level Att 1Pk View 20 dBm 10 dBm -10 dBm -20 dBm | 2021 02:52:59 25.00 dBm 30 dB | Offset SWT | 9.80 dB 👄 RE 9.7 ms 👄 VE | W 100 kHz | z Mode | | P | | -47.71 dBm |
| Puw | Date: 21.0 CT.2 Spectrum Ref Level Att 1Pk View 20 dBm 10 dBm -10 dBm -20 dBm -30 dBm | 2021 02:52:59 25.00 dBm 30 dB | Offset SWT | 9.7 ms • VE | 3W 100 kH; 3W 300 kH; | z Mode | 11[1] | M | 8 | -47.71 dBm |
| Puw | Date: 21.0 CT.2 Spectrum Ref Level Att 1Pk View 20 dBm 10 dBm -10 dBm -20 dBm -30 dBm | 2021 02:52:59 25.00 dBm 30 dB | Offset SWT | 9.80 dB • RE 9.7 ms • VE | 3W 100 kH; 3W 300 kH; | z Mode | 11[1] | M | 8 | -47.71 dBm |
| Puw | Date: 21.0 CT.2 Spectrum Ref Level Att P 1Pk View 20 dBm 10 dBm -10 dBm -20 dBm -30 dBm -40 dBm | 2021 02:52:59 25.00 dBm 30 dB | Offset SWT | 9.7 ms • VE | 3W 100 kH; 3W 300 kH; | z Mode | 11[1] | M | 8 | -47.71 dBm |
| Puw | Date: 21.0 CT.2 Spectrum Ref Level Att 1Pk View 20 dBm 10 dBm 0 dBm -10 dBm -20 dBm -30 dBm -40 dBm | 2021 02:52:59 25.00 dBm 30 dB | Offset SWT | 9.7 ms • VE | 3W 100 kH; 3W 300 kH; | z Mode | 11[1] | M | 8 | -47.71 dBm |
| Puw | Date: 21.0 CT.2 Spectrum Ref Level Att P 1Pk View 20 dBm 10 dBm 10 dBm -10 dBm -20 dBm -30 dBm -40 dBm | 2021 02:52:59 25.00 dBm 30 dB | Offset SWT | 9.7 ms • VE | 3W 100 kH; 3W 300 kH; | z Mode | 11[1] | M | 8 | -47.71 dBm |



| Att 1Pk View | 30 dB SW | 1 110 ms 🖷 | VBW 300 kHz M | TODE AUTO SWEE | P | | |
|--|--|------------------------------|--|----------------------|--------------------|--------------------|--------------------|
| 20 dBm- | | | | M1[1] | | | 1.39 44150 |
| 20 000 | | | | M2[1] | | - | 43,71 |
| 10 dBm | | | | | | 5. | 91013 |
| | M1 | | | | | | |
| 0 dBm | | | | | | | |
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| -20 dBm-D | 1 -18.560 dBm | | | | | | |
| | | | | | | | |
| -30 dBm | | | + + | | - | | |
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| -40 dBm | | | M2 | | | | |
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| -70 dBm | | | | | + + | | |
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| Spectrum Ref Level | 25.00 dBm Off | set 9.80 dB 🖷 | | Inda Auto Swee | | | |
| Spectrum | | | RBW 100 kHz VBW 300 kHz M | tode Auto Swee | p | | |
| Spectrum Ref Level 3 Att 1Pk View | 25.00 dBm Off | | | fode Auto Swee | p | | |
| Spectrum Ref Level 3 | 25.00 dBm Off | | | | p | | |
| Spectrum Ref Level : Att 1Pk View | 25.00 dBm Off | | | | p | | |
| Spectrum Ref Level 3 Att 1Pk View 20 dBm | 25.00 dBm Off | | | | P | | |
| Spectrum Ref Level 3 Att 1Pk View 20 dBm | 25.00 dBm Off | | | | | | 43.52 00460 |
| Spectrum Ref Level 2 Att 1Pk View 20 dBm 10 dBm 0 dBm | 25.00 dBm Off | | | | p | | |
| Spectrum Ref Level 3 • Att • 1Pk View 20 dBm 10 dBm | 25.00 dBm Off | | | | | | |
| Spectrum Ref Level 3 Att 1Pk View 20 dBm 10 dBm 0 dBm -10 dBm | 25.00 dBm Off | | | | | | |
| Spectrum Ref Level 3 Att 1Pk View 20 dBm 10 dBm 0 dBm -10 dBm | 25.00 dBm Off 30 dB SW | | | | | | |
| Spectrum Ref Level 3 Att 1Pk View 20 dBm 10 dBm 0 dBm -10 dBm | 25.00 dBm Off 30 dB SW | | | | | | |
| Spectrum Ref Level : Att 1Pk View 20 dBm 10 dBm 0 dBm -10 dBm -20 dBm | 25.00 dBm Off 30 dB SW | | | | | | |
| Spectrum Ref Level : Att 1Pk View 20 dBm 10 dBm 0 dBm -10 dBm -20 dBm | 25.00 dBm Off 30 dB SW | | | | | | |
| Spectrum Ref Level : Att 1Pk View 20 dBm 10 dBm 0 dBm -10 dBm -20 dBm -30 dBm | 25.00 dBm Off 30 dB SW | | | | | | |
| Spectrum Ref Level : Att 1Pk View 20 dBm 10 dBm 0 dBm -10 dBm -20 dBm -30 dBm | 25.00 dBm Off 30 dB SW | | | | | | |
| Spectrum Ref Level : Att 1Pk View 20 dBm 10 dBm 0 dBm -10 dBm -20 dBm -30 dBm -40 dBm -40 dBm | 25.00 dBm Off 30 dB SW | | | | | | |
| Spectrum Ref Level : Att 1Pk View 20 dBm 10 dBm 0 dBm -10 dBm -20 dBm -30 dBm | 25.00 dBm Off 30 dB SW | | | | | | |
| Spectrum Ref Level : Att 1Pk View 20 dBm 10 dBm 0 dBm -10 dBm -20 dBm -30 dBm -40 dBm -40 dBm | 25.00 dBm Off 30 dB SW | | | | | | |





| | Ref Level 25 Att | 30 dB SWT | 9.80 dB = RBW 10 19 μs = VBW 30 | | Auto FFT | | |
|------|--|-----------------|---|------------------------------|------------|--------|---------------------------|
| | 1Pk View | 30 08 311 | 19 h2 🖷 ADM 20 | IN KH2 MODE | AUTO FFT | | |
| | | | | N | 41[1] | | 2.40 dBm |
| | 20 dBm- | | | | 1 1 | 2.4 | 30032500 GHz |
| | 10.10 | | | | | | |
| | 10 dBm | | | 641 | | | |
| | 0 d8m | | | M1 | | | |
| | 0 dbm | | | | | | |
| | -10 dBm- | | | | - | | _ |
| | | - | | | | \sim | |
| | -20 dBm D1 | -17.600 dBm | | - | | | - |
| Pref | | / | | | | | |
| | -30 dBm | | | | | | |
| | | | | | | | |
| | -40 dBm | | | | | | |
| | | | | | | | |
| | -50 dBm | | | | | | |
| | | | | | | | |
| | -60 dBm | | | | | | |
| | -70 dBm | | | | | | |
| | -70 dbm | | | | | | span 2.0 MHz |
| | Date: 21.0 CT.2021 | 02:56:31 | | | | | |
| | Spectrum Ref Level 25 | 5.00 dBm Offset | : 9.80 dB 🕳 RBW 10 | IO kHz | | | |
| | Spectrum Ref Level 25 | | 9.80 d8 e RBW 10 9.7 ms e VBW 30 | IO kHz IO kHz Mode | Auto Sweep | | (III) A |
| | Spectrum Ref Level 25 | 5.00 dBm Offset | : 9.80 dB 👄 RBW 10 9.7 ms 🖷 VBW 30 | 0 kHz Mode | | | |
| | Spectrum Ref Level 25 | 5.00 dBm Offset | 9.80 dB e RBW 10 9.7 ms e VBW 30 | 0 kHz Mode | Auto Sweep | | -48.10 dBm 932.530 MHz |
| | Spectrum Ref Level 25 Att 1Pk View 20 dBm | 5.00 dBm Offset | 9.80 dB e RBW 10 9.7 ms e VBW 30 | 0 kHz Mode | | | -48.10 dBm |
| | Spectrum Ref Level 25 Att 1Pk View | 5.00 dBm Offset | 9.80 dB • RBW 10 9.7 ms • VBW 30 | 0 kHz Mode | | | -48.10 dBm |
| | Spectrum Ref Level 25 Att 1Pk View 20 dBm 10 dBm | 5.00 dBm Offset | 9.80 d8 e RBW 10 9.7 ms e VBW 30 | 0 kHz Mode | | | -48.10 dBm |
| | Spectrum Ref Level 25 Att 1Pk View 20 dBm | 5.00 dBm Offset | 9.80 d8 e RBW 10 9.7 ms e VBW 30 | 0 kHz Mode | | | -48.10 dBm |
| | Spectrum Ref Level 25 Att 1Pk View 20 dBm 10 dBm 0 dBm | 5.00 dBm Offset | 9.80 dB e RBW 10 9.7 ms e VBW 30 | 0 kHz Mode | | | -48.10 dBm |
| | Spectrum Ref Level 25 Att 1Pk View 20 dBm 10 dBm -10 dBm | 30 dB SWT | 9.80 dB RBW 10 9.7 ms VBW 30 | 0 kHz Mode | | | -48.10 dBm |
| | Spectrum Ref Level 25 Att 1Pk View 20 dBm 10 dBm -10 dBm | 5.00 dBm Offset | 9.80 dB RBW 10 9.7 ms VBW 30 | 0 kHz Mode | | | -48.10 dBm |
| Puw | Spectrum Ref Level 25 Att 1Pk View 20 dBm 10 dBm 0 dBm -10 dBm | 30 dB SWT | 9.80 dB RBW 10 9.7 ms VBW 30 | 0 kHz Mode | | | -48.10 dBm |
| Puw | Spectrum Ref Level 25 Att 1Pk View 20 dBm 10 dBm 0 dBm -10 dBm | 30 dB SWT | 9.80 dB RBW 10 9.7 ms VBW 30 | 0 kHz Mode | | | -48.10 dBm |
| Puw | Spectrum Ref Level 25 Att 1Pk View 20 dBm 10 dBm 0 dBm -10 dBm -20 dBm -30 dBm | 30 dB SWT | 9.80 dB • RBW 10 9.7 ms • VBW 30 | 0 kHz Mode | | | -48.10 dBm |
| Puw | Spectrum Ref Level 25 Att 1Pk View 20 dBm 10 dBm 0 dBm -10 dBm -20 dBm | 30 dB SWT | 9.80 dB • RBW 10 9.7 ms • VBW 30 | 0 kHz Mode | | | -48.10 dBm 932.530 MHz |
| Puw | Spectrum Ref Level 25 Att 1Pk View 20 dBm 10 dBm 0 dBm -10 dBm -20 dBm -30 dBm -40 dBm | -17.600 dBm | 9.7 ms e VBW 30 | Note | | | -48.10 dBm 932.530 MHz |
| Puw | Spectrum Ref Level 25 Att 1Pk View 20 dBm 10 dBm 0 dBm -10 dBm -20 dBm -30 dBm -40 dBm | -17.600 dBm | 9.80 dB • RBW 10 9.7 ms • VBW 30 | | | | -48.10 dBm 932.530 MHz |
| Puw | Spectrum Ref Level 25 Att 1Pk View 20 dBm 10 dBm 0 dBm -10 dBm -20 dBm -30 dBm -40 dBm | -17.600 dBm | 9.7 ms • VBW 30 | | | | -48.10 dBm 932.530 MHz |
| Puw | Spectrum Ref Level 25 Att 1Pk View 20 dBm 10 dBm 0 dBm -10 dBm -20 dBm -30 dBm -40 dBm | -17.600 dBm | 9.7 ms • VBW 30 | | | | -48.10 dBm 932.530 MHz |
| Puw | Spectrum Ref Level 25 Att 1Pk View 20 dBm 10 dBm 0 dBm -10 dBm -20 dBm -30 dBm -40 dBm | -17.600 dBm | 9.7 ms • VBW 30 | | | | -48.10 dBm 932.530 MHz |



| 1Pk Viev | 30 dB | SWT 110 | ms 🖷 VBW 300 k | Hz Mode Auto | 5 0 11 0 0 P | |
|--|-------------------------------|---------------------|---|---------------------------|---------------------------|-------------------------|
| 20 dBm— | | | | M1[1] M2[1] | | 1.9 2.4800 -44.6 |
| 10 dBm- | | | | mz[1] | , | 6.9950 |
| | M1 | | | | | |
| 0 dBm | | | | | | |
| -10 dBm— | | | | | | |
| -20 dBm- | D1 -17.600 | dBm | | | | |
| -30 dBm— | | | | | _ | |
| -40 dBm— | | | | M2 | | |
| -50,dB;t++ | us antre mischilder | a set he hard being | A REAL PROPERTY OF | Sinte Alexandres | the in bintonthe | Ling Didage Land |
| and the state of t | the state of the state of the | | | in the sub- | allerine beginner the sur | and month as and hard a |
| -60 dBm- | | | | | | |
| -70 dBm- | | | | | | |
| Start 1.0 | GHz | | 800 | 1 pts | | Stop 12.0 |
| Spectru Ref Lev | el 25.00 dBm | Offset 9.80 | id8 ● RBW 100 k ms ● VBW 300 k | Hz | 3 Sween | |
| Spectru | el 25.00 dBm 30 dB | Offset 9.80 | dB e RBW 100 k ms e VBW 300 k | Hz | o Sweep | |
| Spectru Ref Lev Att | el 25.00 dBm 30 dB | Offset 9.80 | | Hz | | ~43.7 15.7736 |
| Spectru Ref Lev Att 1Pk Viev 20 dBm— | el 25.00 dBm 30 dB | Offset 9.80 | | Hz Hz Mode Auto | | -43.7 |
| Spectru Ref Lev Att 1Pk Viev | el 25.00 dBm 30 dB | Offset 9.80 | | Hz Hz Mode Auto | | -43.7 |
| Spectru Ref Lev Att 1Pk Viev 20 dBm— | el 25.00 dBm 30 dB | Offset 9.80 | | Hz Hz Mode Auto | | -43.7 |
| Spectru Ref Lev Att 1Pk Viev 20 dBm— 10 dBm— | el 25.00 dBm 30 dB | Offset 9.80 | | Hz Hz Mode Auto | | -43.7 |
| Spectru Ref Lev Att 1Pk View 20 dBm- 10 dBm- 0 dBm- | el 25.00 dBm 30 dB | SWT 130 | | Hz Hz Mode Auto | | -43.7 |
| Spectru Ref Lev Att 1Pk Viev 20 dBm- 10 dBm- -10 dBm- -20 dBm- | vel 25.00 dBm 30 dB | SWT 130 | | Hz Hz Mode Auto | | -43.7 |
| Spectru Ref Lev Att 1Pk Viev 20 dBm- 10 dBm- 0 dBm- -10 dBm- | vel 25.00 dBm 30 dB | SWT 130 | | Hz Hz Mode Auto | | -43.7 |
| Spectru Ref Lev Att 1Pk Viev 20 dBm- 10 dBm- -10 dBm- -20 dBm- | vel 25.00 dBm 30 dB | SWT 130 | | Hz Hz Mode Auto | | -43.7 |
| Spectru Ref Lev Att 1Pk View 20 dBm- 10 dBm- -10 dBm- -20 dBm- -30 dBm- | vel 25.00 dBm 30 dB | SWT 130 | | Hz Hz Mode Auto | | -43.7 |
| Spectru Ref Lev Att 1Pk View 20 dBm- 10 dBm- -10 dBm- -20 dBm- -30 dBm- | vel 25.00 dBm 30 dB | SWT 130 | | Hz Hz Mode Auto | | -43.7 |
| Spectru Ref Lev Att 10 k View 20 dBm- 10 dBm- -10 dBm- -20 dBm- -30 dBm- -40 dBm- | vel 25.00 dBm 30 dB | SWT 130 | | Hz Hz Mode Auto | | -43.7 |





| | π/4DQ | PSK_LCH_Graphs | |
|------|--|---|------------------------------|
| | Spectrum Ref Level 25.00 dBm Offset 9.1 | 84 dB 👄 RBW 100 kHz | |
| | | 19 µs • VBW 300 kHz Mode Auto FFT | |
| | • 1Pk View | | 1.07.40 |
| | 20 dBm- | M1[1] | -4.07 dBm 2.402023250 GHz |
| | | | |
| | 10 dBm | | |
| | | | |
| | 0 dBm | | |
| | -10 dBm | | |
| | | | |
| | -20 dBm | | |
| Pref | D1 -24.070 dBm | | |
| | -30 dBm | | |
| | -40 dBm | | |
| | | | |
| | -50 dBm | | |
| | | | |
| | -60 dBm | | |
| | -70 dBm | | |
| | CF 2.402 GHz | 8001 pts | Span 2.0 MHz |
| | Date:21.0CT.2021 03:00:37 | | |
| | Spectrum Ref Level 25.00 dBm Offset 9.1 | 84 dB 👄 RBW 100 kHz | |
| | Spectrum Ref Level 25.00 dBm Offset 9.1 Att 30 dB SWT 9 | 84 dB ● RBW 100 kHz 7 ms ● VBW 300 kHz Mode Auto Sweep | |
| | Spectrum Ref Level 25.00 dBm Offset 9.1 Att 30 dB SWT 9 1Pk View | | -47.52 dBm |
| | Spectrum Ref Level 25.00 dBm Offset 9.1 Att 30 dB SWT 9 | .7 ms 🖷 VBW 300 kHz Mode Auto Sweep | |
| | Spectrum Ref Level 25.00 dBm Offset 9.1 Att 30 dB SWT 9 1Pk View | .7 ms 🖷 VBW 300 kHz Mode Auto Sweep | -47.52 dBm |
| | Spectrum Ref Level 25.00 dBm Offset 9.1 Att 30 dB SWT 9 1Pk View 20 dBm | .7 ms 🖷 VBW 300 kHz Mode Auto Sweep | -47.52 dBm |
| | Spectrum Ref Level 25.00 dBm Offset 9.1 Att 30 dB SWT 9 1Pk View 20 dBm | .7 ms 🖷 VBW 300 kHz Mode Auto Sweep | -47.52 dBm |
| | Spectrum Ref Level 25.00 dBm Offset 9.1 Att 30 dB SWT 9 1Pk View 20 dBm 10 dBm 0 dBm | .7 ms 🖷 VBW 300 kHz Mode Auto Sweep | -47.52 dBm |
| | Spectrum Ref Level 25.00 dBm Offset 9.1 Att 30 dB SWT 9 1Pk View 20 dBm 10 dBm | .7 ms 🖷 VBW 300 kHz Mode Auto Sweep | -47.52 dBm |
| | Spectrum Ref Level 25.00 dBm Offset 9.1 Att 30 dB SWT 9 1Pk View 20 dBm 10 dBm 0 dBm | .7 ms 🖷 VBW 300 kHz Mode Auto Sweep | -47.52 dBm |
| Puw | Spectrum Ref Level 25.00 dBm Offset 9.1 Att 30 dB SWT 9 1Pk View 20 dBm 10 dBm 10 dBm 10 dBm -10 dBm -20 dBm -10 dBm | .7 ms 🖷 VBW 300 kHz Mode Auto Sweep | -47.52 dBm |
| Puw | Spectrum Ref Level 25.00 dBm Offset 9.1 Att 30 dB SWT 9 1Pk View 20 dBm 10 dBm 10 dBm 10 dBm -10 dBm -20 dBm -20 dBm -20 dBm | .7 ms 🖷 VBW 300 kHz Mode Auto Sweep | -47.52 dBm |
| Puw | Spectrum Ref Level 25.00 dBm Offset 9.1 Att 30 dB SWT 9 IPk View 20 dBm 10 dBm 10 dBm 10 dBm -0 dBm -10 dBm -10 dBm -10 dBm -10 dBm -30 dBm -30 dBm -30 dBm | .7 ms 🖷 VBW 300 kHz Mode Auto Sweep | -47.52 dBm |
| Puw | Spectrum Ref Level 25.00 dBm Offset 9.1 Att 30 dB SWT 9 1Pk View 20 dBm 10 dBm 10 dBm 10 dBm -10 dBm -20 dBm -10 dBm | .7 ms 🖷 VBW 300 kHz Mode Auto Sweep | -47.52 dBm 885.370 MHz |
| Puw | Spectrum Ref Level 25.00 dBm Offset 9.1 Att 30 dB SWT 9 IPk View 20 dBm 10 dBm 10 dBm 10 dBm 0 dBm 10 dBm 10 dBm -10 dBm 0 dBm -30 dBm 10 -24.070 dBm -30 dBm 01 -24.070 dBm -30 dBm -30 dBm | Mail Mail | -47.52 dBm 885.370 MHz |
| Puw | Spectrum Ref Level 25.00 dBm Offset 9.1 Att 30 dB SWT 9 IPk View 20 dBm 10 dBm 10 dBm 10 dBm 10 dBm 10 dBm 10 dBm -10 dBm 10 dBm 10 dBm 10 dBm 10 dBm -20 dBm D1 -24.070 dBm -30 dBm 10 dBm< | .7 ms • VBW 300 kHz Mode Auto Sweep | -47.52 dBm 885.370 MHz |
| Puw | Spectrum Ref Level 25.00 dBm Offset 9.1 Att 30 dB SWT 9 IPk View 20 dBm 10 dBm 10 dBm 10 dBm 0 dBm 10 dBm 10 dBm -10 dBm 0 dBm -30 dBm 10 -24.070 dBm -30 dBm 01 -24.070 dBm -30 dBm -30 dBm | Mail Mail | -47.52 dBm 885.370 MHz |
| Puw | Spectrum Ref Level 25.00 dBm Offset 9.1 Att 30 dB SWT 9 IPk View 20 dBm 10 dBm 10 dBm 10 dBm 10 dBm 10 dBm 10 dBm -10 dBm 10 dBm 10 dBm 10 dBm 10 dBm -20 dBm D1 -24.070 dBm -30 dBm 10 dBm< | Mail Mail | -47.52 dBm 885.370 MHz |
| Puw | Spectrum Ref Level 25.00 dBm Offset 9.1 Att 30 dB SWT 9 IPk View 20 dBm 10 dBm 10 dBm 10 dBm 0 dBm 10 dBm 10 dBm -10 dBm -20 dBm -10 dBm -30 dBm -30 dBm -10 dBm -20 dBm -20 dBm -30 dBm -30 dBm -30 dBm -30 dBm -30 dBm -40 dBm | Mail Mail | -47.52 dBm 885.370 MHz |



| ●1Pk Yiew | (| | 1 | - | | Auto Sweep | | | |
|---|----------------------------|---------------|----------------------------|----------------------------|--|----------------------|---------------------------|------------------------|---------|
| 20 dBm— | | | | | | 1[1] | | | -6.55 |
| 10 dBm- | | | | | M | 2[1] | | | 43,58 |
| | | | | | | | | | |
| 0 dBm | M1 | | - | | | | - | | |
| -10 dBm— | Ť | | | | _ | | | | |
| -20 dBm- | | | | | | | | | |
| -20 0000 | D1 -24.070 | dBm | | - | | | | | |
| -30 dBm— | | | | | - | | | | |
| -40 dBm- | | | | | M2 | | | | |
| | | and later | and a burden | | Any pr | 1 | | | be |
| 150 dBm | and a state of the | | and the state of the state | a fing | Contraction of the local division of the loc | and a special sector | and the state of the last | the state of the state | |
| -60 dBm- | | | | | | | | 1 1 | |
| | | | | | | | | | |
| -70 dBm- | | | | | | | | | - |
| Start 1.0 | GHz | | - | 8001 | pts | | - | Stop | 12.0 0 |
| Spectru Ref Lev | el 25.00 dBn | Offset | | RBW 100 kHz | | | | | |
| Spectru Ref Lev Att | m el 25.00 dBn 30 dB | Offset | | RBW 100 kHz VBW 300 kHz | | Auto Sweep | | | |
| Spectru Ref Lev Att | m el 25.00 dBn 30 dB | Offset | | | Mode | Auto Sweep | , | | 44.37 (|
| Spectru Ref Lev Att | m el 25.00 dBn 30 dB | Offset | | | Mode | | | | 44.37 (|
| Spectru Ref Lev Att | m el 25.00 dBn 30 dB | Offset | | | Mode | | , | | |
| Spectru Ref Lev Att 1Pk View 20 dBm— | m el 25.00 dBn 30 dB | Offset | | | Mode | | | | |
| Spectru Ref Lev Att 1Pk View 20 dBm- 10 dBm- | m el 25.00 dBn 30 dB | Offset | | | Mode | | | | |
| Spectru Ref Lev Att 1Pk View 20 dBm- 10 dBm- -10 dBm- | m el 25.00 dBn 30 dB | Offset | | | Mode | | | | |
| Spectru Ref Lev Att 1Pk View 20 dBm- 10 dBm- 0 dBm- | m el 25.00 dBn 30 dB | Offset SWT | | | Mode | | | | |
| Spectru Ref Lev Att 1Pk View 20 dBm- 10 dBm- -10 dBm- | m | Offset SWT | | | Mode | | | | |
| Spectru Ref Lev Att 1Pk View 20 dBm- 10 dBm- -10 dBm- -20 dBm- | m | Offset SWT | 130 ms 🖷 ' | | Mode | | | | |
| Spectru Ref Lev 110 dBm 10 dBm 10 dBm -10 dBm -20 dBm -30 dBm | m | Offset SWT | | | Mode | | | | |
| Spectru Ref Lev 110 dBm 10 dBm 10 dBm -10 dBm -20 dBm -30 dBm | m | Offset SWT | 130 ms | | Mode | | | | |
| Spectru Ref Lev 110 dBm 10 dBm 10 dBm -10 dBm -20 dBm -30 dBm | m | Offset SWT | 130 ms | | Mode | | | | |
| Spectru Ref Lev Att 1Pk View 20 dBm- 10 dBm- 0 dBm- -10 dBm- -20 dBm- -30 dBm- -40 dBm- | m | Offset SWT | 130 ms | | Mode | | | | |





| | | | ICH_Graphs | | |
|------|--|--|---|---------|------------------------------|
| | Spectrum | | | | |
| | Ref Level 25.00 dB Att 30 d | | BW 100 kHz BW 300 kHz Mode Aut | O FFT | |
| | • 1Pk View | | | | |
| | 20 dBm | | M1[| u | -2.68 dBm 2.441023000 GHz |
| | | | | | |
| | 10 dBm | | | | |
| | 0 dBm | | M1 | | |
| | o ubii | | ~~~~ | | |
| | -10 dBm- | | | | |
| | | | | | |
| Pref | -20 dBm D1 -22.68 | 0 dBm | | | |
| | -30 dBm | | | | |
| | | | | | |
| | 40 dBm | | | | |
| | -50 dBm | | | | |
| | | | | | |
| | -60 dBm | | | | |
| | -70 dBm | | | | |
| | | | | | |
| | | | | | Span 2.0 MHz |
| | CF 2.441 GHz | | 8001 pts | | oput 210 Mile |
| | CF 2.441 GHz | 17 | 8001 pts | | opun 210 mile |
| | Date:21.0CT.2021 03:04: | 17 | 8001 pts | | |
| | Date: 21.0 CT.2021 03:04: Spectrum Ref Level 25.00 dB | m Offset 9.80 dB 👄 R | BW 100 kHz | | |
| | Date: 21.0 CT.2021 03:04: Spectrum Ref Level 25.00 dBi Att 30 d | m Offset 9.80 dB 👄 R | | o Sweep | |
| | Date: 21.0 CT.2021 03:04: Spectrum Ref Level 25.00 dBr Att 30 d 1Pk View | m Offset 9.80 dB 👄 R | BW 100 kHz | | -47.58 dBm |
| | Date: 21.0 CT.2021 03:04: Spectrum Ref Level 25.00 dBi Att 30 d | m Offset 9.80 dB 👄 R | BW 100 kHz BW 300 kHz Mode Au | | |
| | Date: 21.0 CT.2021 03:04: Spectrum Ref Level 25.00 dBr Att 30 d 1Pk View | m Offset 9.80 dB 👄 R | BW 100 kHz BW 300 kHz Mode Au | | -47.58 dBm |
| | Date: 21.0 CT.2021 03:04: Spectrum Ref Level 25.00 dBa Att 30 d 10 dBm 10 dBm | m Offset 9.80 dB 👄 R | BW 100 kHz BW 300 kHz Mode Au | | -47.58 dBm |
| | Date: 21.0 CT.2021 03:04: Spectrum Ref Level 25.00 dBi Att 30 d 1Pk View 20 dBm | m Offset 9.80 dB 👄 R | BW 100 kHz BW 300 kHz Mode Au | | -47.58 dBm |
| | Date: 21.0CT.2021 03:04: Spectrum Ref Level 25.00 dBi Att 30 d 1Pk View 20 dBm 10 dBm 0 dBm | m Offset 9.80 dB 👄 R | BW 100 kHz BW 300 kHz Mode Au | | -47.58 dBm |
| | Date: 21.0 CT.2021 03:04: Spectrum Ref Level 25.00 dBa Att 30 d 10 dBm 10 dBm | m Offset 9.80 dB 👄 R | BW 100 kHz BW 300 kHz Mode Au | | -47.58 dBm |
| Duru | Date: 21.0CT.2021 03:04: Spectrum Ref Level 25.00 dBu Att 30 d 10 dBm 10 dBm -10 dBm -20 dBm | m Offset 9.80 dB ● R B SWT 9.7 ms ● V | BW 100 kHz BW 300 kHz Mode Au | | -47.58 dBm |
| Puw | Date: 21.0CT.2021 03:04: Spectrum Ref Level 25.00 dBu Att 30 d 1Pk View 20 dBm 10 dBm -10 dBm -20 dBm D1 -22.68 | m Offset 9.80 dB ● R B SWT 9.7 ms ● V | BW 100 kHz BW 300 kHz Mode Au | | -47.58 dBm |
| Puw | Date: 21.0CT.2021 03:04: Spectrum Ref Level 25.00 dBu Att 30 d 10 dBm 10 dBm -10 dBm -20 dBm | m Offset 9.80 dB ● R B SWT 9.7 ms ● V | BW 100 kHz BW 300 kHz Mode Au | | -47.58 dBm |
| Puw | Date: 21.0CT.2021 03:04: Spectrum Ref Level 25.00 dBu Att 30 d 1Pk View 20 dBm 10 dBm -10 dBm -20 dBm D1 -22.68 | m Offset 9.80 dB ● R B SWT 9.7 ms ● V | BW 100 kHz BW 300 kHz Mode Au | | -47.58 dBm |
| Puw | Date: 21.0CT.2021 03:04: Spectrum Ref Level 25.00 dBu Att 30 d 1Pk View 20 dBm 10 dBm -10 dBm -20 dBm D1 -22.68 -30 dBm -40 dBm | m Offset 9.80 dB ● R B SWT 9.7 ms ● V | BW 100 kHz BW 300 kHz Mode Au M1[| | -47.58 dBm 724.860 MHz |
| Puw | Date: 21.0CT.2021 03:04: Spectrum Ref Level 25.00 dBu Att 30 d 1Pk View 20 dBm 10 dBm -10 dBm -20 dBm D1 -22.68 -30 dBm -40 dBm | m Offset 9.80 dB R B SWT 9.7 ms V | BW 100 kHz BW 300 kHz Mode Au | | -47.58 dBm |
| Puw | Date: 21.0CT.2021 03:04: Spectrum Ref Level 25.00 dBu Att 30 d 1Pk View 20 dBm 10 dBm -10 dBm -20 dBm D1 -22.68 -30 dBm -40 dBm | m Offset 9.80 dB R B SWT 9.7 ms V | BW 100 kHz BW 300 kHz Mode Au M1[| | -47.58 dBm 724.860 MHz |
| Puw | Date: 21.0CT.2021 03:04: Spectrum Ref Level 25.00 dBa Att 30 d 10 dBm 10 dBm -10 dBm -20 dBm -20 dBm -30 dBm -40 dBm -40 dBm | m Offset 9.80 dB R B SWT 9.7 ms V | BW 100 kHz BW 300 kHz Mode Au M1[| | -47.58 dBm 724.860 MHz |
| Puw | Date: 21.0CT.2021 03:04: Spectrum Ref Level 25.00 dBa Att 30 d 10 dBm 10 dBm -10 dBm -20 dBm -20 dBm -30 dBm -40 dBm -40 dBm | m Offset 9.80 dB R B SWT 9.7 ms V | BW 100 kHz BW 300 kHz Mode Au M1[| | -47.58 dBm 724.860 MHz |



| ●1Pk Viev | 30 di V | SWT | | /BW 300 kHz (| | | | |
|---|--|---------------------|------------------------------|--------------------|----------------|----------------|------------------|-------------------------|
| 20 dBm— | | | | | M1[1] M2[1] | | 2. | -2.54 44150 43.89 |
| 10 dBm— | _ | | - | | - TALES | _ | | 81488 |
| | MI | | | | | | | |
| 0 dBm | T | | | | | | | |
| -10 dBm- | - | | - | | | - | | |
| -20 d8m- | | | | | | | | |
| LUGON | D1 -22.680 | dBm | - | | | | | |
| -30 dBm- | | | | | | | | |
| -40 dBm- | | | | MI2 | | _ | | |
| - | | مرافليا مرد | مر و الم | Laboration address | L to take | and the second | ter deal and | and the |
| -50 d8m+ | and the property of the second se | per bistopher Barry | - Inderster (and the second | | And the second | | Happer Mary Chie | distant'n |
| -60 dBm- | | | - | | | | | |
| -70 dBm- | | | | | | | | |
| Start 1.0 | CH- | | | 8001 pts | | | Pton | 12.0 0 |
| Spectru Ref Lev | el 25.00 dBn | Offset | 9.80 dB 🕳 F | BW 100 kHz | Mada Auto Swa | 97 | | |
| Spectru Ref Lev Att | im vel 25.00 dBn 30 dB | Offset | 9.80 dB 🖷 F 130 ms 🖷 V | | Mode Auto Swe | ер | | |
| Spectru Ref Lev Att | im vel 25.00 dBn 30 dB | Offset | 9.80 dB 👄 F 130 ms 🖷 V | BW 100 kHz | Mode Auto Swe | ep | | 44.66 |
| Spectru Ref Lev Att | im vel 25.00 dBn 30 dB | Offset | 9.80 dB 👄 R 130 ms 🖷 V | BW 100 kHz | | ep | | |
| Spectru Ref Lev Att | im vel 25.00 dBn 30 dB | Offset | 9.80 dB 👄 🖡 130 ms 🖷 V | BW 100 kHz | | ep | | |
| Spectru Ref Lev Att 1Pk Viev 20 dBm- | im vel 25.00 dBn 30 dB | Offset | 9.80 dB 👄 🖡 130 ms 🖷 V | BW 100 kHz | | ep | | |
| Spectru Ref Lev 1Pk Viev 20 dBm- 10 dBm- 0 dBm- | im vel 25.00 dBn 30 dB | Offset | 9.80 dB 👄 🖡 130 ms 🖷 V | BW 100 kHz | | ep | | |
| Spectru Ref Lev Att 1Pk Viev 20 dBm- | im vel 25.00 dBn 30 dB | Offset | 9.80 dB 👄 🖡 130 ms 🖷 V | BW 100 kHz | | ep | | |
| Spectru Ref Lev 1Pk Viev 20 dBm- 10 dBm- 0 dBm- | vel 25.00 dBn 30 dł | Offset SWT | 9.80 dB | BW 100 kHz | | ep | | |
| Spectru Ref Lev Att 1Pk Viev 20 dBm- 10 dBm- -10 dBm- -20 dBm- | im vel 25.00 dBn 30 dB | Offset SWT | 9.80 dB 👄 🖡 130 ms 🖷 🛛 | BW 100 kHz | | ep | | |
| Spectru Ref Lev Att 1Pk Viev 20 dBm- 10 dBm- -10 dBm- | vel 25.00 dBn 30 dł | Offset SWT | 9.80 dB | BW 100 kHz | | ep | | 44,66 (44460 |
| Spectru Ref Lev Att 1Pk Viev 20 dBm- 10 dBm- -10 dBm- -20 dBm- | vel 25.00 dBn 30 dł | Offset SWT | 9.80 dB • F 130 ms • V | BW 100 kHz | | ep | | |
| Spectru Ref Lev Att 1Pk Viev 20 dBm- 10 dBm- -10 dBm- -20 dBm- -30 dBm- | vel 25.00 dBn 30 dł | Offset SWT | 130 ms • V | BW 100 kHz | | | | |
| Spectru Ref Lev Att 1Pk Viev 20 dBm- 10 dBm- -10 dBm- -20 dBm- -30 dBm- -40 dBm- | vel 25.00 dBn 30 dł | Offset SWT | 130 ms • V | BW 100 kHz | | | | |
| Spectru Ref Lev Att 1Pk Viev 20 dBm- 10 dBm- -10 dBm- -20 dBm- -30 dBm- | vel 25.00 dBn 30 dł | Offset SWT | 130 ms • V | BW 100 kHz | | | | |
| Spectru Ref Lev Att 1Pk Viev 20 dBm- 10 dBm- -10 dBm- -20 dBm- -30 dBm- -40 dBm- | vel 25.00 dBn 30 dł | Offset SWT | 130 ms • V | BW 100 kHz | | | | |





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|------|--|---|---------------------------------|------------------------------|
| | Spectrum | | | |
| | | Offset 9.80 dB RBW 100 kH | | |
| | 1Pk View | | | |
| | 20 dBm- | | M1[1] | -1.57 dBm 2.480023000 GHz |
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| | 10 dBm | | | |
| | 0 dBm | | M1 | |
| | o dom | | | |
| | -10 dBm | | | |
| | -20 dBm | | | |
| Pref | D1 -21.570 dBn | | | |
| | -30 dBm | | | |
| | -40.d8m | | | |
| | -4LLOBM | | | ~ |
| | -50 dBm | | | |
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| | CF 2.48 GHz Date:21.0CT.2021 03:08:10 | 800 | 1 pts | Span 2.0 MHz |
| | Date: 21.0 CT.2021 03:08:10 Spectrum Ref Level 25.00 dBm | 0ffset 9.80 dB ⊜ RBW 100 kH | łz | |
| | Date: 21.0 CT.2021 03:08:10 Spectrum Ref Level 25.00 dBm Att 30 dB | 0ffset 9.80 dB ⊜ RBW 100 kH | | |
| | Date: 21.0 CT.2021 03:08:10 Spectrum Ref Level 25.00 dBm (Att 30 dB 3 1Pk View | 0ffset 9.80 dB ⊜ RBW 100 kH | łz | -47.47 dBm |
| | Date: 21.0 CT.2021 03:08:10 Spectrum Ref Level 25.00 dBm Att 30 dB | 0ffset 9.80 dB ⊜ RBW 100 kH | łz łz Mode Auto Sweep | |
| | Date: 21.0 CT.2021 03:08:10 Spectrum Ref Level 25.00 dBm (Att 30 dB 3 1Pk View | 0ffset 9.80 dB ⊜ RBW 100 kH | łz łz Mode Auto Sweep | -47.47 dBm |
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| Puw | Date: 21.0 CT.2021 03:08:10 | 0ffset 9.80 d8 ● RBW 100 kł WT 9.7 ms ● VBW 300 kł | łz łz Mode Auto Sweep | -47.47 dBm |
| Puw | Date: 21.0 CT.2021 03:08:10 Spectrum Ref Level 25.00 dBm Att 30 dB | 0ffset 9.80 d8 ● RBW 100 kł WT 9.7 ms ● VBW 300 kł | łz łz Mode Auto Sweep | -47.47 dBm |
| Puw | Date: 21.0CT.2021 03:08:10 | 0ffset 9.80 d8 ● RBW 100 kł WT 9.7 ms ● VBW 300 kł | łz łz Mode Auto Sweep | -47.47 dBm |
| Puw | Date: 21.0 CT.2021 03:08:10 | 0ffset 9.80 d8 ● RBW 100 kł WT 9.7 ms ● VBW 300 kł | łz łz Mode Auto Sweep | -47.47 dBm |
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| Puw | Date: 21.0 CT.2021 03:08:10 | 0ffset 9.80 d8 ● RBW 100 kł WT 9.7 ms ● VBW 300 kł | Iz Mode Auto Sweep | -47.47 dBm 904.530 MHz |
| Puw | Date: 21.0CT.2021 03:08:10 | offset 9.80 d8 ● RBW 100 kł WT 9.7 ms ● VBW 300 kł | Iz Mode Auto Sweep | -47.47 dBm 904.530 MHz |
| Puw | Date: 21.0 CT.2021 03:08:10 | offset 9.80 d8 ● RBW 100 kł WT 9.7 ms ● VBW 300 kł | Iz Mode Auto Sweep | -47.47 dBm 904.530 MHz |
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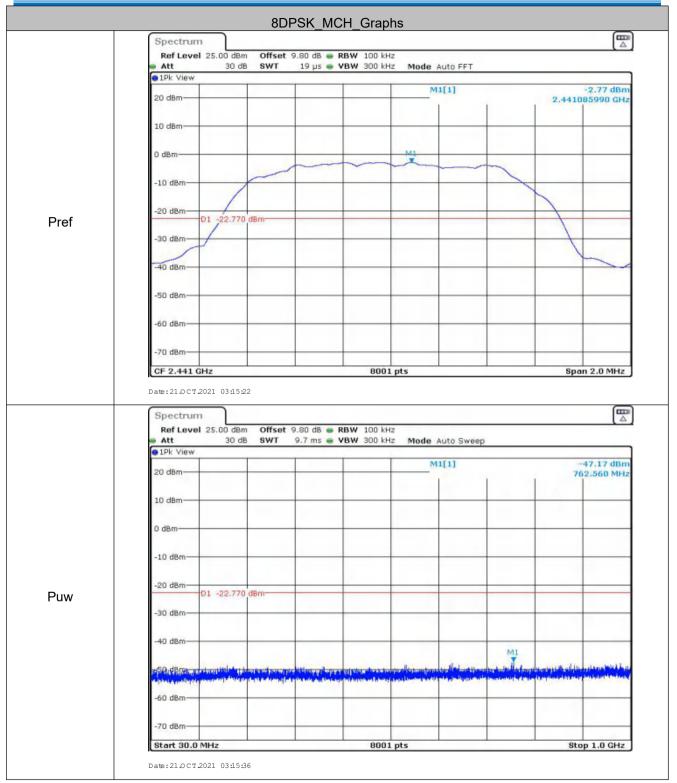
| | Spectrum Ref Level 2: Att | 5.00 dBm Offset 30 dB SWT | t 9.84 dB | | |
|------|--|------------------------------|---|--|---------------------------|
| | 1Pk View | 30 06 5WI | 19 hz 🚔 APM 30 | 0 kHz Mode Auto FFT | |
| | | | | M1[1] | -4.15 dBn |
| | 20 dBm | | | | 2.401953010 GH |
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| | 10 dBm- | | | | |
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| | -50 dBm | | | | |
| | | | | | |
| | -60 dBm | | | | |
| | | | | | |
| | -70 dBm- | | | | |
| | CF 2.402 GHz | 2 | 8 | 001 pts | Span 2.0 MHz |
| | Date: 21.0 CT.202 | 1 03:11:52 | | | Ē |
| | Spectrum Ref Level 2 | 5.00 dBm Offset | t 9.84 dB |) kHz) kHz - Mode Auto Swee | |
| | Spectrum | | t 9.84 dB ● RBW 10 9.7 ms ● VBW 30 |) kHz) kHz Mode Auto Swee | |
| | Spectrum Ref Level 2: Att PIPk View | 5.00 dBm Offset | t 9.84 dB |) kHz) kHz Mode Auto Swee M1[1] | ep 47.04 dBn |
| | Spectrum Ref Level 2: Att | 5.00 dBm Offset | t 9.84 dB e RBW 10 9.7 ms e VBW 30 |) kHz Mode Auto Swee | 9p |
| | Spectrum Ref Level 2: Att 1Pk View 20 dBm | 5.00 dBm Offset | t 9.84 dB e RBW 10 9.7 ms e VBW 30 |) kHz Mode Auto Swee | ep 47.04 dBn |
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| | Spectrum Ref Level 2: Att 1Pk View 20 dBm | 5.00 dBm Offset | t 9.84 dB e RBW 10 9.7 ms e VBW 30 |) kHz Mode Auto Swee | ep 47.04 dBn |
| | Spectrum Ref Level 2: Att 1Pk View 20 dBm- 10 dBm- | 5.00 dBm Offset | t 9.84 dB e RBW 10 9.7 ms e VBW 30 |) kHz Mode Auto Swee | ep 47.04 dBn |
| | Spectrum Ref Level 2: Att 1Pk View 20 dBm- 10 dBm- | 5.00 dBm Offset | t 9.84 dB ● RBW 10 9.7 ms ● VBW 30 |) kHz Mode Auto Swee | ep 47.04 dBn |
| | Spectrum Ref Level 2: Att 1Pk View 20 dBm 10 dBm 0 dBm | 5.00 dBm Offset | t 9.84 dB ● RBW 10 9.7 ms ● VBW 30 |) kHz Mode Auto Swee | ep 47.04 dBn |
| | Spectrum Ref Level 2: Att 1Pk View 20 dBm 10 dBm 0 dBm -10 dBm -20 dBm | 5.00 dBm Offset 30 dB SWT | t 9.84 dB e RBW 10 9.7 ms e VBW 30 |) kHz Mode Auto Swee | ep 47.04 dBn |
| Puw | Spectrum Ref Level 2: Att 1Pk View 20 dBm 10 dBm 0 dBm -10 dBm -20 dBm | 5.00 dBm Offset | t 9.84 dB • RBW 10 9.7 ms • VBW 30 |) kHz Mode Auto Swee | ep 47.04 dBn |
| Puw | Spectrum Ref Level 2: Att 1Pk View 20 dBm 10 dBm 0 dBm -10 dBm -20 dBm | 5.00 dBm Offset 30 dB SWT | t 9.84 dB • RBW 10 9.7 ms • VBW 30 |) kHz Mode Auto Swee | ep 47.04 dBn |
| Puw | Spectrum Ref Level 2: Att 1Pk View 20 dBm 10 dBm 0 dBm -10 dBm -20 dBm D1 -30 dBm | 5.00 dBm Offset 30 dB SWT | t 9.84 dB • RBW 10 9.7 ms • VBW 30 |) kHz Mode Auto Swee | ep 47.04 dBn |
| Puw | Spectrum Ref Level 2: Att 1Pk View 20 dBm 10 dBm 0 dBm -10 dBm -20 dBm D1 | 5.00 dBm Offset 30 dB SWT | t 9.84 dB • RBW 10 9.7 ms • VBW 30 |) kHz Mode Auto Swee | -47.04 dBn 893.010 MH; |
| Puw | Spectrum Ref Level 2: Att PIPk View 20 dBm 10 dBm 0 dBm -10 dBm -20 dBm D1 -30 dBm | 5.00 dBm Offset 30 dB SWT | 9.7 ms VBW 30 | MI[1] | *P |
| Puw | Spectrum Ref Level 2: Att PIPk View 20 dBm 10 dBm 0 dBm -10 dBm -20 dBm D1 -30 dBm | 5.00 dBm Offset 30 dB SWT | 9.7 ms VBW 30 | MI[1] | *P |
| Puw | Spectrum Ref Level 2: Att PIPk View 20 dBm 10 dBm 0 dBm -10 dBm -20 dBm -20 dBm -30 dBm -40 dBm | 5.00 dBm Offset 30 dB SWT | 9.7 ms • VBW 30 | MI[1] | *P |
| Puw | Spectrum Ref Level 2: Att PIPk View 20 dBm 10 dBm 0 dBm -10 dBm -20 dBm D1 -30 dBm | 5.00 dBm Offset 30 dB SWT | 9.7 ms • VBW 30 | MI[1] | *P |
| Puw | Spectrum Ref Level 2: Att PIPk View 20 dBm 10 dBm 0 dBm -10 dBm -20 dBm -20 dBm -30 dBm -40 dBm | 5.00 dBm Offset 30 dB SWT | 9.7 ms • VBW 30 | MI[1] | *P |



| ●1Pk View | r | | | | ode Auto Swe | | | |
|---|----------------------------|-----------------|-----------------------------|----------------------------------|-----------------------------|------------------------|-----------------------|-------------------------|
| 20 dBm— | - | | | | M1[1] | | | -4.10 40160 43.18 |
| 10 dBm— | - | | | | | | | 88500 |
| | | | | | | | | |
| 0 dBm | MI | | | | | | | |
| -10 dBm- | - | | | | | - | | |
| | | | | | | | | |
| -20 dBm- | D1 -24.150 | dBm | - | - | | _ | | |
| -30 dBm- | | | | | | _ | | |
| 10 10- | | | | | | | | |
| -40 dBm- | | | | aller adalanta | | | | |
| -50, dam- | the attendit | | A house the day | Station of the local division of | Indesidential Production of | La stall control hope | dia Madathan | des al de la second |
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| -60 dBm- | | | | | | | | |
| -70 dBm- | | | | | | | | |
| Start 1.0 | CH7 | | | 8001 pts | | _ | Ston | 12.0 G |
| Spectru Ref Lev | el 25.00 dBm | Offset | 9.84 dB 🖷 Ri | BW 100 kHz | ada Auto Cwa | | | |
| Spectru Ref Lev | m el 25.00 dBm 30 dB | Offset | 9.84 dB 👄 Ri 130 ms 🖷 Vi | 8W 100 kHz 8W 300 kHz M | ode Auto Swe | ер | | |
| Spectru Ref Lev Att | m el 25.00 dBm 30 dB | Offset | 9.84 dB 🕳 Ri 130 ms 🖷 Vi | 3W 100 kHz BW 300 kHz M | ode Auto Swe | ер | | 43.65 0 |
| Spectru Ref Lev | m el 25.00 dBm 30 dB | Offset | 9.84 dB 👄 Ri 130 ms 🖷 Vi | 3W 100 kHz BW 300 kHz M | | ep | | |
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| Spectru Ref Lev Att 1Pk View 20 dBm- | m el 25.00 dBm 30 dB | Offset | 9.84 dB 🖷 R 130 ms 🖷 V | 3W 100 kHz BW 300 kHz M | | ep | | |
| Spectru Ref Lev Att 1Pk View 20 dBm— | m el 25.00 dBm 30 dB | Offset | 9.84 dB R | 3W 100 kHz 3W 300 kHz M | | ep | | |
| Spectru Ref Lev Att 1Pk View 20 dBm- | m el 25.00 dBm 30 dB | Offset | 9.84 dB • R 130 ms • V | 3W 100 kHz BW 300 kHz M | | | | |
| Spectru Ref Lev Att 1Pk View 20 dBm- 10 dBm- -10 dBm- | m el 25.00 dBm 30 dB | Offset | 9.84 dB 🖷 R 130 ms 🖷 V | 3W 100 kHz BW 300 kHz M | | | | |
| Spectru Ref Lev 1Pk View 20 dBm- 10 dBm- 0 dBm- | m el 25.00 dBm 30 dB | Offset S SWT | 9.84 dB RI 130 ms V | 3W 100 kHz 3W 300 kHz M | | | | |
| Spectru Ref Lev Att 1Pk View 20 dBm- 10 dBm- -10 dBm- | m | Offset S SWT | 9.84 dB R | 3W 100 kHz BW 300 kHz M | | | | |
| Spectru Ref Lev Att 1Pk View 20 dBm- 10 dBm- -10 dBm- -20 dBm- -30 dBm- | m | Offset S SWT | 9.84 dB R | 3W 100 kHz BW 300 kHz M | | | | |
| Spectru Ref Lev Att 1Pk View 20 dBm- 10 dBm- -10 dBm- -20 dBm- | m | Offset S SWT | 9.84 dB R 130 ms V | 3W 100 kHz M | | | | |
| Spectru Ref Lev Att 1Pk View 20 dBm- 10 dBm- -10 dBm- -20 dBm- -30 dBm- | m | Offset S SWT | 9.84 dB R | 3W 100 kHz BW 300 kHz M | | | | |
| Spectru Ref Lev Att 1Pk View 20 dBm- 10 dBm- -10 dBm- -20 dBm- -30 dBm- -40 dBm- | m | Offset S SWT | 9.84 dB R | aw 100 kHz BW 300 kHz M | | | | |
| Spectru Ref Lev Att 1Pk View 20 dBm- 10 dBm- -10 dBm- -20 dBm- -30 dBm- | m | Offset S SWT | 9.84 dB R | aw 100 kHz M | | | | |
| Spectru Ref Lev Att 1Pk View 20 dBm- 10 dBm- -10 dBm- -20 dBm- -30 dBm- -40 dBm- | m | Offset S SWT | 9.84 dB R | 3W 100 kHz BW 300 kHz M | | | | |





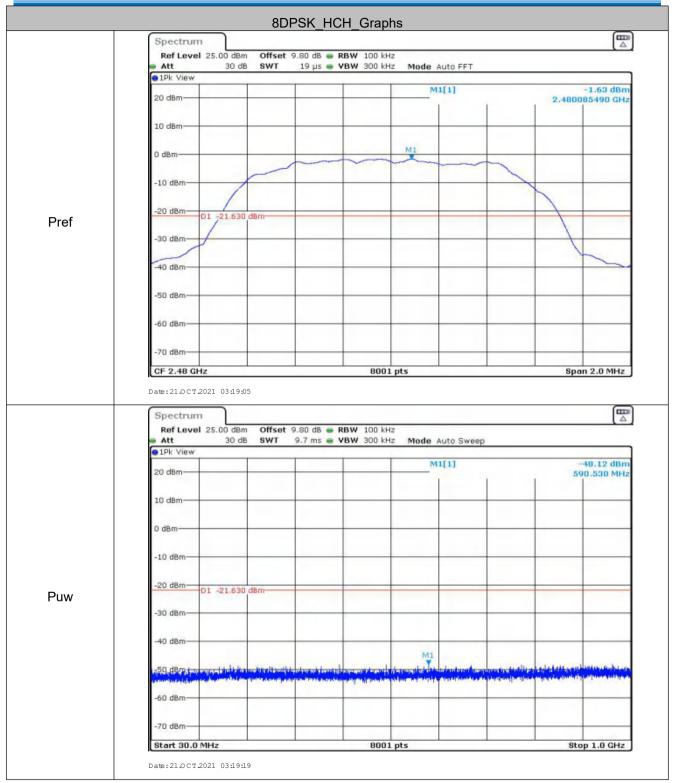




| 1Pk Yiew | 30 dB | SWT | | | | Auto Sweep | | |
|---|--------------------|----------------------|---------------------------|---------------------|---------------|-----------------------|----------|-----------------------------|
| 20 dBm | | | | | | 1[1] 2[1] | 2. | -2.55 c 44150 43,72 c |
| 10 dBm | | | | | | | 6. | 93450 |
| | MI | | | | | | | |
| 0 dBm | T | | | | | | | |
| -10 dBm | | | | | | | - | |
| -20 dBm | | - | | | | | - | |
| | 01 -22.770 0 | 3Bm- | | | | | | |
| -30 dBm | | | | | | | | |
| -40 dBm | - | | | | M2 | | | |
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| -50 dBmit | | Long And Description | Allerene attende | and a second second | Sector Sector | and the second second | | |
| -60 dBm | | | | | | | | |
| | | | | | | | | |
| -70 dBm | | | | | _ | | - | |
| Start 1.0 G | Hz | | | 8001 | pts | | Stop | 12.0 G |
| | 25.00 dBm | Offset | 9.80 dB 🖷 R 130 ms 🖷 V | BW 100 kHz | 2 | Auto Sween | | (|
| Spectrum | 021 03:15:49 | Offset | 9.80 dB 🕳 R 130 ms 🖷 V | BW 100 kHz | 2 | Auto Sweep | | (|
| Spectrum Ref Level Att 1Pk View | 25.00 dBm | Offset | | BW 100 kHz | . Mode | Auto Sweep | | 44.03 d |
| Spectrum Ref Level Att | 25.00 dBm | Offset | | BW 100 kHz | . Mode | | | 44.03 d |
| Spectrum Ref Level Att 1Pk View | 25.00 dBm | Offset | | BW 100 kHz | . Mode | | | 44.03 d |
| Spectrum Ref Level Att 1Pk View 20 dBm 10 dBm | 25.00 dBm | Offset | | BW 100 kHz | . Mode | | | 44.03 d |
| Spectrum Ref Level Att 1Pk View 20 dBm | 25.00 dBm | Offset | | BW 100 kHz | . Mode | | | 44.03 di 80700 d |
| Spectrum Ref Level Att 1Pk View 20 dBm 10 dBm | 25.00 dBm | Offset | | BW 100 kHz | . Mode | | | 44.03 d |
| Spectrum Ref Level Att 1Pk View 20 dBm 10 dBm 0 dBm -10 dBm | 25.00 dBm | Offset | | BW 100 kHz | . Mode | | | 44.03 d |
| Spectrum Ref Level Att 1Pk View 20 dBm 10 dBm -10 dBm -20 dBm | 25.00 dBm | Offset SWT | | BW 100 kHz | . Mode | | | 44.03 d |
| Spectrum Ref Level Att 1Pk View 20 dBm 10 dBm -10 dBm -20 dBm | 25.00 dBm 30 dB | Offset SWT | | BW 100 kHz | . Mode | | | 44.03 d |
| Spectrum Ref Level Att 1Pk View 20 dBm 10 dBm -10 dBm -20 dBm | 25.00 dBm 30 dB | Offset SWT | | BW 100 kHz | . Mode | | | 44.03 d |
| Spectrum Ref Level Att 1Pk View 20 dBm 10 dBm -10 dBm -20 dBm | 25.00 dBm 30 dB | Offset SWT | | BW 100 kHz | . Mode | | | 44.03 d |
| Spectrum Ref Level Att 1Pk View 20 dBm 10 dBm -10 dBm -20 dBm -30 dBm | 25.00 dBm 30 dB | Offset SWT | 130 ms 🖷 V | BW 100 kHz | . Mode | 1[1] | | 44.03 d |
| Spectrum Ref Level Att 1Pk View 20 dBm 10 dBm -10 dBm -20 dBm -30 dBm | 25.00 dBm 30 dB | Offset SWT | 130 ms 🖷 V | BW 100 kHz | Mode | 1[1] | | 44.03 d |
| Spectrum Ref Level Att 1Pk View 20 dBm 10 dBm -10 dBm -20 dBm -30 dBm | 25.00 dBm 30 dB | Offset SWT | 130 ms • V | BW 100 kHz | Mode | 1[1] | | 44.03 d |
| Spectrum Ref Level Att 20 dBm 10 dBm 0 dBm -10 dBm -20 dBm -30 dBm | 25.00 dBm 30 dB | Offset SWT | 130 ms • V | BW 100 kHz | Mode | 1[1] | | 44.03 d |
| Spectrum Ref Level Att 20 dBm 10 dBm 0 dBm -10 dBm -20 dBm -30 dBm | 25.00 dBm 30 dB | Offset SWT | 130 ms • V | BW 100 kHz | Mode | 1[1] | | 44.03 d |









Report No.: CQASZ20211001751E-01

| 1Pk View | | | | - | | | | | _ |
|--|----------------------------|--------------------------|---------------|--------------|---------------------|-----------------|-----------------------|---------------|---------------------|
| 20 dBm— | | | | | | M1[1] M2[1] | | | -2.0 480 43.0 |
| 10 dBm- | | | | | | | | 6. | 893 |
| | | | | | | | | | |
| 0 dBm | M1 | | - | - | | | | | - |
| | | | | | | | | | |
| -10 dBm- | | | | - | | | | | - |
| 00.40- | | | | _ | | | | | |
| -20 dBm- | D1 -21.630 | dBm | | | | | | | |
| -30 dBm- | | | | | | | | | |
| | | | | | | | | | |
| -40 dBm- | | | | | M2 | | | | - |
| | | | | In the state | attack of | | | | |
| 150 dBd | | in an the set of the set | Para and Para | M | and a second second | | And the factor of the | and the state | line |
| Martinetal | Lauren partin | a desired and | | | 1140 | Bull and London | a share to be a star | | a la sul |
| -60 dBm- | | _ | | - | | | | | - |
| | | | | | | | | | |
| -70 dBm- | | | | | | | | | |
| Start 1.0 | GHz | | | 8001 | pts | | | Stop | 12 |
| | m el 25.00 dBm | | | RBW 100 kH | | | | | |
| Spectru Ref Lev Att | m el 25.00 dBm 30 dB | | | | | Auto Sweep | | | |
| Spectru Ref Lev Att | m el 25.00 dBm 30 dB | | | | z Mode | | | | 42.9 |
| Spectru Ref Lev | m el 25.00 dBm 30 dB | | | | z Mode | Auto Sweep | | | |
| Spectru Ref Lev Att 1Pk View 20 dBm— | m el 25.00 dBm 30 dB | | | | z Mode | | | | |
| Spectru Ref Lev Att | m el 25.00 dBm 30 dB | | | | z Mode | | | | |
| Spectru Ref Lev Att 1Pk View 20 dBm— 10 dBm— | m el 25.00 dBm 30 dB | | | | z Mode | | | | |
| Spectru Ref Lev Att 1Pk View 20 dBm— 10 dBm— | m el 25.00 dBm 30 dB | | | | z Mode | | | | |
| Spectru Ref Lev Att 1Pk View 20 dBm- 10 dBm- 0 dBm- | m el 25.00 dBm 30 dB | | | | z Mode | | | | |
| Spectru Ref Lev Att 1Pk View 20 dBm— 10 dBm— | m el 25.00 dBm 30 dB | | | | z Mode | | | | |
| Spectru Ref Lev Att 1Pk View 20 dBm- 10 dBm- 0 dBm- | m 25.00 dBm 30 dB | SWT | | | z Mode | | | | |
| Spectru Ref Lev Att 1Pk View 20 dBm- 10 dBm- 0 dBm- -10 dBm- | m el 25.00 dBm 30 dB | SWT | | | z Mode | | | | |
| Spectru Ref Lev Att 1Pk View 20 dBm- 10 dBm- -10 dBm- | m 25.00 dBm 30 dB | SWT | | | z Mode | | | | |
| Spectru Ref Lev Att 1Pk View 20 dBm- 10 dBm- -10 dBm- -20 dBm- | m 25.00 dBm 30 dB | SWT | | | z Mode | | | | |
| Spectru Ref Lev Att 1Pk View 20 dBm- 10 dBm- -10 dBm- -20 dBm- | m 25.00 dBm 30 dB | SWT | | | z Mode | | | | 42.9 |
| Spectru Ref Lev Att 1Pk View 20 dBm- 10 dBm- -10 dBm- -20 dBm- -30 dBm- | m 25.00 dBm 30 dB | SWT | | | z Mode | | | 19. | |
| Spectru Ref Lev Att 1Pk View 20 dBm- 10 dBm- -10 dBm- -20 dBm- -30 dBm- | m 25.00 dBm 30 dB | SWT | | | z Mode | | | 19. | |
| Spectru Ref Lev Att 1Pk View 20 dBm 0 dBm -10 dBm -20 dBm -30 dBm -40 dBm | m 25.00 dBm 30 dB | SWT | | | z Mode | | | 19. | |
| Spectru Ref Lev Att 1Pk View 20 dBm- 10 dBm- -10 dBm- -20 dBm- -30 dBm- | m 25.00 dBm 30 dB | SWT | | | z Mode | | | 19. | |
| Spectru Ref Lev Att 1Pk View 20 dBm- 0 dBm- -10 dBm- -20 dBm- -30 dBm- -40 dBm- -60 dBm- | m 25.00 dBm 30 dB | SWT | | | z Mode | | | 19. | |
| Spectru Ref Lev Att 1Pk View 20 dBm- 10 dBm- -10 dBm- -20 dBm- -30 dBm- -40 dBm- | m 25.00 dBm 30 dB | SWT | | | z Mode | | | 19. | |

Remark:

Pre test 9kHz to 25GHz, find the highest point when testing, so only the worst data were shown in the test report. Per FCC Part 15.33 (a) and 15.31 (o) ,The amplitude of spurious emissions from intentional radiators which are attenuated more than 20 dB below the permissible value need not be reported unless specifically required elsewhere in this part.



4.10Other requirements Frequency Hopping Spread Spectrum System

| Test Requirement: | 47 CFR Part 15C Section 15.247 (a)(1), (h) requirement: |
|---|---|
| rate from a Pseudorandom of on the average by each trans | nnel frequencies that are selected at the system hopping rdered list of hopping frequencies. Each frequency must be used equally smitter. The system receivers shall have input bandwidths that match the of their corresponding transmitters and shall shift frequencies in smitted signals. |
| channels during each transn receiver, must be designed t transmitter be presented with employing short transmissio | spectrum systems are not required to employ all available hopping hission. However, the system, consisting of both the transmitter and the o comply with all of the regulations in this section should the n a continuous data (or information) stream. In addition, a system n bursts must comply with the definition of a frequency hopping system nissions over the minimum number of hopping channels specified in |
| the system to recognize othe independently chooses and The coordination of frequence | nce within a frequency hopping spread spectrum system that permits er users within the spectrum band so that it individually and adapts its hopsets to avoid hopping on occupied channels is permitted. by hopping systems in any other manner for the express purpose of ccupancy of individual hopping frequencies by multiple transmitters is |
| Compliance for section 15 | 247(a)(1) |
| stage shift register whose 5th outputs are added in a modu | lo-two addition stage. And the result is fed back to the input of the first with the first ONE of 9 consecutive ONEs; i.e. the shift register is initialized ges: 9 sequence: 2 ⁹ -1 = 511 bits |
| | hift Register for Generation of the PRBS sequence m Frequency Hopping Sequence as follow: 7 64 8 73 16 75 1 |
| According to Bluetooth Cordbandwidths that match the | on the average by each transmitter. e Specification, Bluetooth receivers are designed to have input and IF hopping channel bandwidths of any Bluetooth transmitters and shift on with the transmitted signals. |
| Compliance for section 15. | 247(g) |
| pseudorandom hopping freq | re Specification, the Bluetooth system transmits the packet with the uency with a continuous data and the short burst transmission from the ansmitted under the frequency hopping system with the pseudorandom |



Compliance for section 15.247(h)

According to Bluetooth Core specification, the Bluetooth system incorporates with an adaptive system to detect other user within the spectrum band so that it individually and independently to avoid hopping on the occupied channels.

According to the Bluetooth Core specification, the Bluetooth system is designed not have the ability to coordinated with other FHSS System in an effort to avoid the simultaneous occupancy of individual hopping frequencies by multiple transmitter.

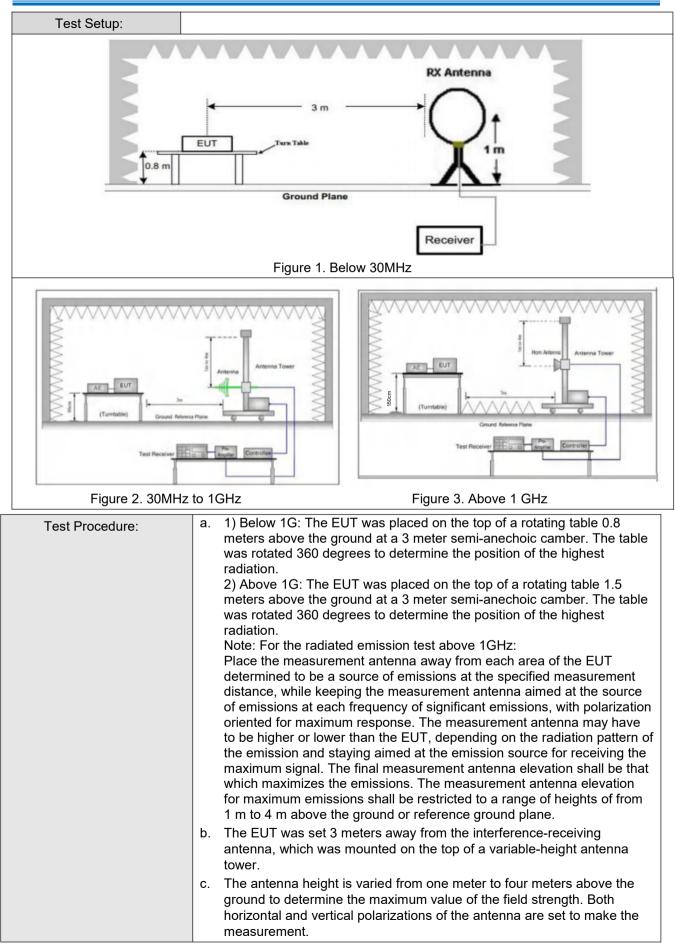


4.11 Radiated Spurious Emission & Restricted bands

| Test Requirement: | 47 CFR Part 15C Section 15.209 and 15.205 | | | | | | | |
|-------------------|---|--------------|--------------------------------|-------------------------|---------------|--------------------------|--|--|
| Test Method: | ANSI C63.10: 2013 | | | | | | | |
| Test Site: | Measurement Distance | : 3m | n (Semi-Anech | oic Cham | ber) | | | |
| Receiver Setup: | Frequency | | Detector | RBW | VBW | Remark | | |
| | 0.009MHz-0.090MH | z | Peak | 10kHz | z 30kHz | Peak | | |
| | 0.009MHz-0.090MH | z | Average | 10kHz | z 30kHz | Average | | |
| | 0.090MHz-0.110MH | z | Quasi-peak | 10kHz | z 30kHz | Quasi-peak | | |
| | 0.110MHz-0.490MH | z | Peak | 10kHz | z 30kHz | Peak | | |
| | 0.110MHz-0.490MH | z | Average | 10kHz | z 30kHz | Average | | |
| | 0.490MHz -30MHz | | Quasi-peak | 10kHz | z 30kHz | Quasi-peak | | |
| | 30MHz-1GHz | | Peak | 100 k⊢ | lz 300kHz | Peak | | |
| | Above 1GHz | | Peak | 1MHz | : 3MHz | Peak | | |
| | | | Peak | 1MHz | 10Hz | Average | | |
| Limit: | Frequency | | eld strength crovolt/meter) | Limit (dBuV/m) | Remark | Measureme distance (m | | |
| | 0.009MHz-0.490MHz | 2 | 400/F(kHz) | - | - | 300 | | |
| | 0.490MHz-1.705MHz | 24 | 1000/F(kHz) | - | - | 30 | | |
| | 1.705MHz-30MHz | | 30 | - | - | 30 | | |
| | 30MHz-88MHz | | 100 | 40.0 | Quasi-peak | 3 | | |
| | 88MHz-216MHz | | 150 | 43.5 | Quasi-peak | x 3 | | |
| | 216MHz-960MHz | | 200 | 46.0 | Quasi-peak | 3 | | |
| | 960MHz-1GHz | | 500 | 54.0 | Quasi-peak | 3 | | |
| | Above 1GHz | | 500 | 54.0 | Average | 3 | | |
| | Note: 15.35(b), Unless emissions is 20dE applicable to the peak emission lev | 3 ab equi | ove the maxim | ium perm est. This p | itted average | emission limit | | |









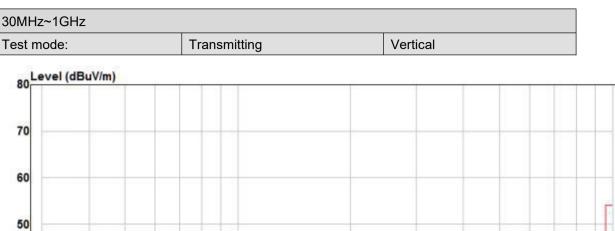
| | d. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters (for the test frequency of below 30MHz, the antenna was tuned to heights 1 meter) and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading. e. The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode. f. If the emission level of the EUT in peak mode was 10dB lower than the limit specified, then testing could be stopped and the peak values of the EUT would be reported. Otherwise the emissions that did not have 10dB margin would be re-tested one by one using peak, quasi-peak or average method as specified and then reported in a data sheet. g. Test the EUT in the lowest channel (2402MHz), the middle channel (2441MHz), the Highest channel (2480MHz) h. The radiation measurements are performed in X, Y, Z axis positioning for Transmitting mode, and found the X axis positioning which it is the worst case. i. Repeat above procedures until all frequencies measured was complete. |
|------------------------|--|
| Exploratory Test Mode: | Non-hopping transmitting mode with all kind of modulation and all kind of data type Transmitting mode, Charging mode. |
| Final Test Mode: | Through Pre-scan, find the DH5 of data type and GFSK modulation is the worst case. Pretest the EUT at Transmitting mode and Charging mode, found the Transmitting mode which it is worse case For below 1GHz part, through pre-scan, the worst case is the lowest channel. Only the worst case is recorded in the report. |
| Test Results: | Pass |



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Report No.: CQASZ20211001751E-01

4.11.1 Radiated Emission below 1GHz



| | Murmer 1 2 | . Then | | | | | www.www. | |
|----|------------|--------|--------|---------|------------------|--------|----------|-----------|
| 30 | 50 | | 100 | Frequer | 200 ncy (MHz) | | 500 | 1000 |
| | | Read | | | Limit | Over | | |
| | Freq | Level | Factor | Level | Line | Limit | Remark | Pol/Phase |
| - | MHZ | dBuV | dB/m | dBuV/m | dBuV/m | dB | | |
| | 44.28 | 10.74 | 10.79 | 21.53 | 40.00 | -18.47 | Peak | VERTICAL |
| | 51.48 | 10.18 | 7.78 | 17.96 | 40.00 | -22.04 | Peak | VERTICAL |
| | 89.59 | 9.57 | 10.01 | 19.58 | 43.50 | -23.92 | Peak | VERTICAL |
| | 132.69 | 8.73 | 9.71 | 18.44 | 43.50 | -25.06 | Peak | VERTICAL |
| | 250.30 | 11.16 | 12.09 | 23.25 | 46.00 | -22.75 | Peak | VERTICAL |
| pp | 501.18 | 11.22 | 18.29 | 29.51 | 46.00 | -16.49 | Peak | VERTICAL |

Remark:

40

30

The field strength is calculated by adding the Antenna Factor, Cable Factor & Preamplifier. The basic equation with a sample calculation is as follows:

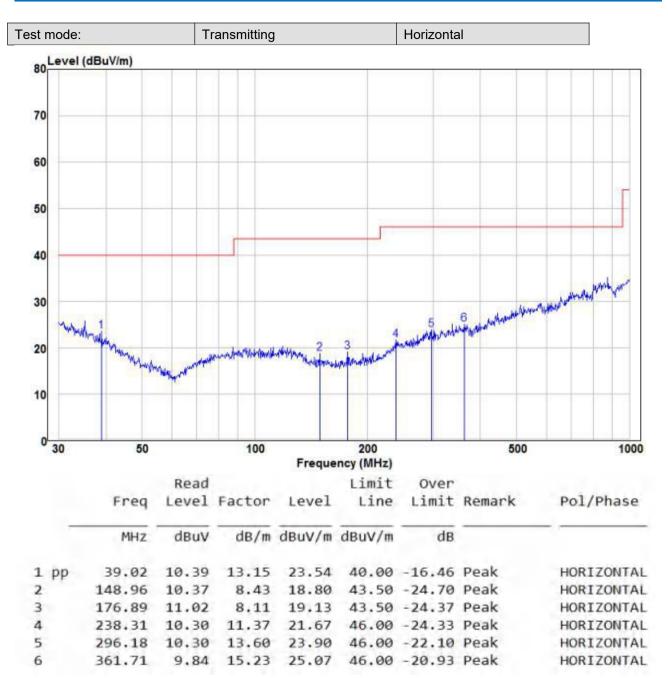
Factor= Antenna Factor + Cable Factor - Preamplifier Factor,

Level = Read Level + Factor,

Over Limit=Level-Limit Line.



Report No.: CQASZ20211001751E-01



Remark:

The field strength is calculated by adding the Antenna Factor, Cable Factor & Preamplifier. The basic equation with a sample calculation is as follows:

Factor= Antenna Factor + Cable Factor - Preamplifier Factor,

Level = Read Level + Factor,

Over Limit=Level-Limit Line.



4.11.2 Transmitter Emission above 1GHz

| Worse case mode: | | GFSK(DH5) | | Test channel: | | Lowest | |
|------------------|------------------|-----------|-------------------|---------------|--------|------------------|-----------|
| Frequency | Meter Reading | Factor | Emission Level | Limits | Over | Detector Type | Ant. Pol. |
| (MHz) | (dBµV) | (dB) | (dBµV/m) | (dBµV/m) | (dB) | | H/V |
| 2390 | 54.95 | -9.2 | 45.75 | 74 | -28.25 | Peak | н |
| 2400 | 56.60 | -9.39 | 47.21 | 74 | -26.79 | Peak | Н |
| 4804 | 54.15 | -4.33 | 49.82 | 74 | -24.18 | Peak | Н |
| 7206 | 49.66 | 1.01 | 50.67 | 74 | -23.33 | Peak | Н |
| 2390 | 53.95 | -9.2 | 44.75 | 74 | -29.25 | Peak | V |
| 2400 | 55.72 | -9.39 | 46.33 | 74 | -27.67 | Peak | V |
| 4804 | 53.10 | -4.33 | 48.77 | 74 | -25.23 | Peak | V |
| 7206 | 50.90 | 1.01 | 51.91 | 74 | -22.09 | Peak | V |

| Worse case mode: | | GFSK(DH5) | | Test channel: | | Middle | |
|------------------|------------------|-----------|-------------------|---------------|--------|------------------|-----------|
| Frequency | Meter Reading | Factor | Emission Level | Limits | Over | Detector Type | Ant. Pol. |
| (MHz) | (dBµV) | (dB) | (dBµV/m) | (dBµV/m) | (dB) | | H/V |
| 4882 | 52.41 | -4.11 | 48.30 | 74 | -25.70 | peak | Н |
| 7323 | 49.08 | 1.51 | 50.59 | 74 | -23.41 | peak | Н |
| 4882 | 53.75 | -4.11 | 49.64 | 74 | -24.36 | peak | V |
| 7323 | 50.72 | 1.51 | 52.23 | 74 | -21.77 | peak | V |

| Worse case mode: | | GFSK(DH5) | | Test channel: | | Highest | |
|------------------|------------------|-----------|-------------------|---------------|--------|------------------|-----------|
| Frequency | Meter Reading | Factor | Emission Level | Limits | Over | Detector Type | Ant. Pol. |
| (MHz) | (dBµV) | (dB) | (dBµV/m) | (dBµV/m) | (dB) | | H/V |
| 2483.5 | 54.68 | -9.29 | 45.39 | 74 | -28.61 | Peak | н |
| 4960 | 51.38 | -4.04 | 47.34 | 74 | -26.66 | Peak | Н |
| 7440 | 49.67 | 1.57 | 51.24 | 74 | -22.76 | Peak | Н |
| 2483.5 | 54.60 | -9.29 | 45.31 | 74 | -28.69 | Peak | v |
| 4960 | 51.15 | -4.04 | 47.11 | 74 | -26.89 | Peak | V |
| 7440 | 48.91 | 1.57 | 50.48 | 74 | -23.52 | Peak | V |

Remark:

1) The field strength is calculated by adding the Antenna Factor, Cable Factor & Preamplifier. The basic equation with a sample calculation is as follows:

Final Test Level =Receiver Reading + Antenna Factor + Cable Factor – Preamplifier Factor

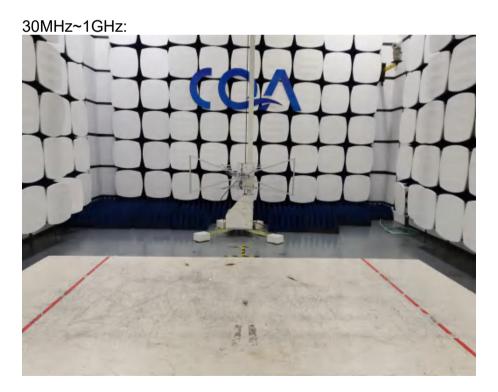
2) Scan from 9kHz to 25GHz, the disturbance above 10GHz and below 30MHz was very low. As shown in this section, for frequencies above 1GHz, the field strength limits are based on average limits. However, the peak field strength of any emission shall not exceed the maximum permitted average limits specified above by more than 20 dB under any condition of modulation. So, only the peak measurements were shown in the report.



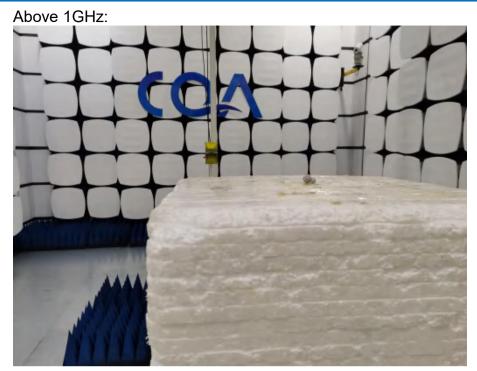
5 Photographs - EUT Test Setup

5.1 Radiated Emission









5.2 Conducted Emission





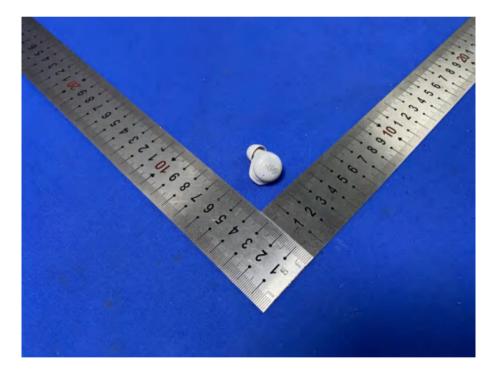
6 Photographs - EUT Constructional Details



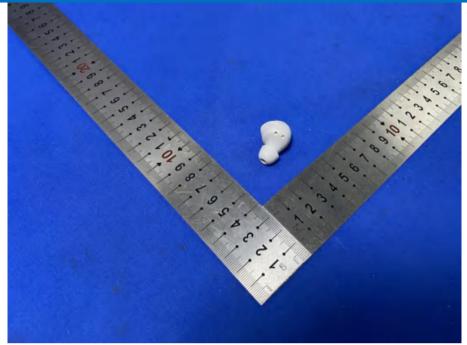


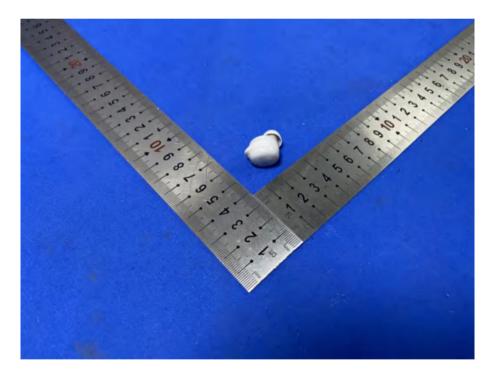




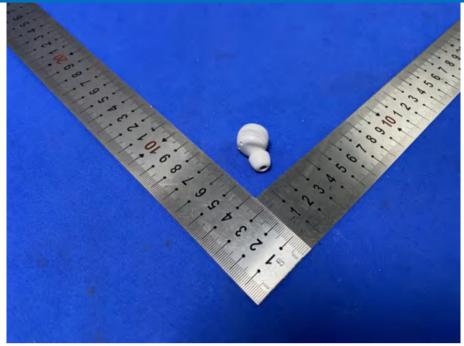






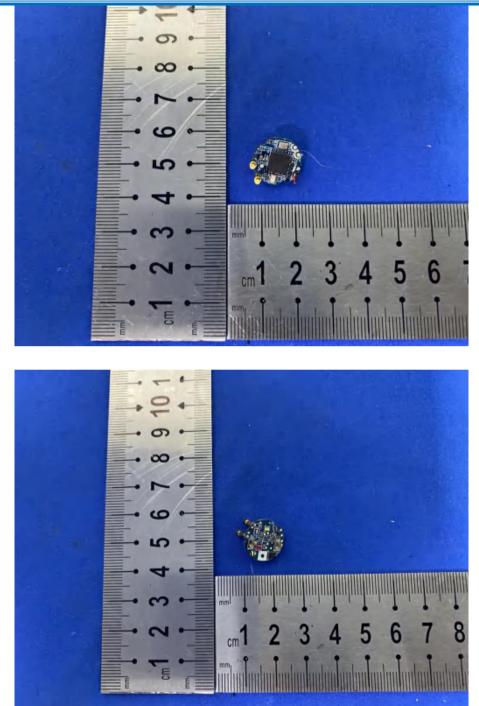




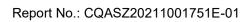




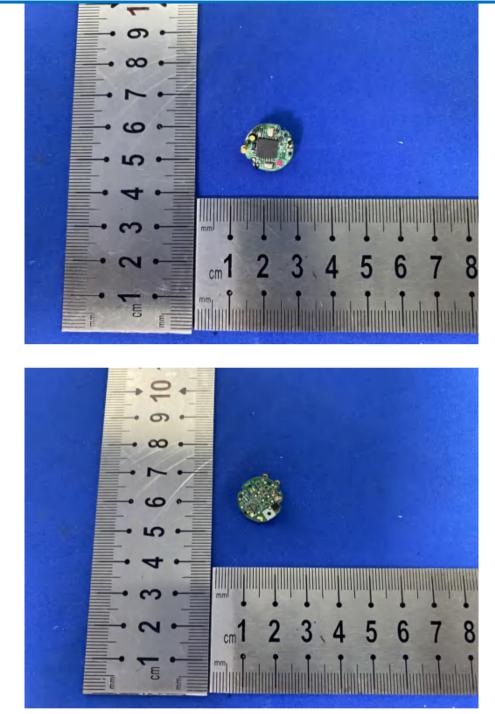






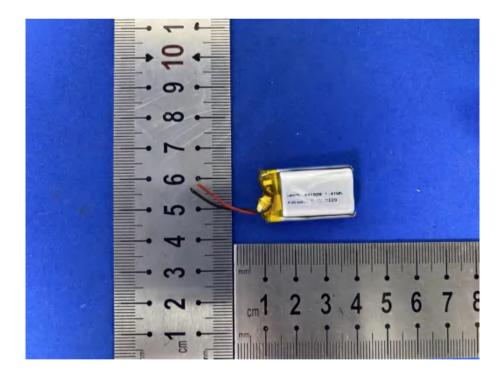






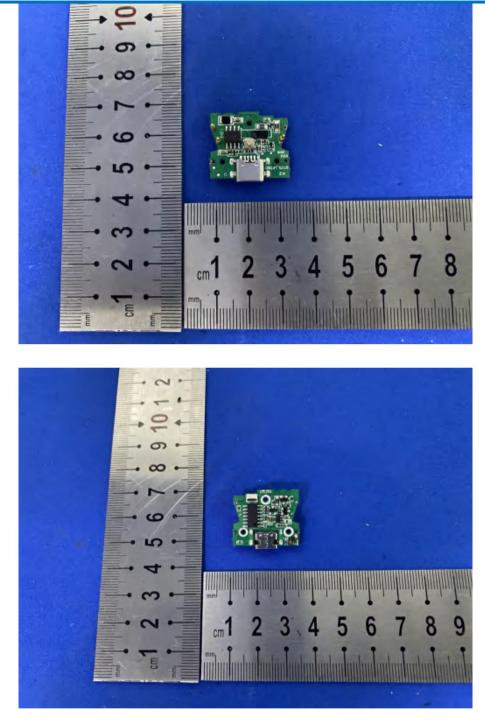












The End