

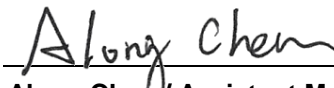
FCC Test Report

FCC ID : SUFIFT24PL4A
Equipment : InfoTag 4.2 G3 COLOUR
Model No. : InfoTag 4.2 G3
Brand Name : DIGI
Applicant : DIGI SINGAPORE PTE LTD
Address : 4 Leng Kee Rd, #05-03/04/05&11, SIS Building,
Singapore 159088
Standard : 47 CFR FCC Part 15.249
Received Date : Nov. 23, 2023
Tested Date : Nov. 29, 2023

We, International Certification Corporation, would like to declare that the tested sample has been evaluated and in compliance with the requirement of the above standards. The test results contained in this report refer exclusively to the product. It shall not be reproduced except in full without the written approval of our laboratory.

Reviewed by:

Approved by:



Along Chen / Assistant Manager



Gary Chang / Manager

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Appendix A. Unwanted Emission

Appendix B. 20dB and Occupied Bandwidth

Release Record

| Report No. | Version | Description | Issued Date |
|------------|---------|---------------|---------------|
| FR3N2302 | Rev. 01 | Initial issue | Dec. 14, 2023 |

Summary of Test Results

| FCC Rules | Test Items | Measured | Result |
|--|---|-------------------------------|--------|
| 15.207 | AC Power Line Conducted Emissions | Note ¹ | N/A |
| 15.249(a) | Field Strength of Fundamental | Meet the requirement of limit | Pass |
| 15.249(a)(d) | Field Strength of Harmonics and Emissions Radiated outside of the Specified Frequency Bands | Meet the requirement of limit | Pass |
| 15.215(c) | 20dB bandwidth | Meet the requirement of limit | Pass |
| 15.203 | Antenna Requirement | Meet the requirement of limit | Pass |
| <p>N/A means Not Applicable. Note¹: The EUT consumes DC power from battery, so the test is not required.</p> | | | |

Declaration of Conformity:

The test results with all measurement uncertainty excluded are presented in accordance with the regulation limits or requirements declared by manufacturers.

Comments and Explanations:

The declared of product specification for EUT presented in the report are provided by the manufacturer, and the manufacturer takes all the responsibilities for the accuracy of product specification.

1 General Description

1.1 Information

1.1.1 Specification of the Equipment under Test (EUT)

| RF General Information | | | | |
|------------------------|------------|-----------------|----------------|-----------|
| Frequency Range (MHz) | Modulation | Ch. Freq. (MHz) | Channel Number | Data Rate |
| 2402-2480 | GFSK | 2402-2480 | 0-78 [79] | 250 kbps |

1.1.2 Antenna Details

| Ant. No. | Type | Connector | Gain (dBi) |
|----------|-------------|---------------------|------------|
| 1 | PCB ANTENNA | LAYOUT ON PCB BOARD | 3.3 |

1.1.3 Power Supply Type of Equipment under Test (EUT)

| | |
|------------|--|
| Power Type | 3Vdc from battery (Coin Battery x3) Brand: Henli Max Model: CR2450 |
|------------|--|

1.1.4 Accessories

N/A

1.1.5 Channel List

| Frequency band (MHz) | | | | 2400~2483.5 | | | |
|----------------------|-----------------|---------|-----------------|-------------|-----------------|---------|-----------------|
| Channel | Frequency (MHz) | Channel | Frequency (MHz) | Channel | Frequency (MHz) | Channel | Frequency (MHz) |
| 0 | 2402 | 20 | 2422 | 40 | 2442 | 60 | 2462 |
| 1 | 2403 | 21 | 2423 | 41 | 2443 | 61 | 2463 |
| 2 | 2404 | 22 | 2424 | 42 | 2444 | 62 | 2464 |
| 3 | 2405 | 23 | 2425 | 43 | 2445 | 63 | 2465 |
| 4 | 2406 | 24 | 2426 | 44 | 2446 | 64 | 2466 |
| 5 | 2407 | 25 | 2427 | 45 | 2447 | 65 | 2467 |
| 6 | 2408 | 26 | 2428 | 46 | 2448 | 66 | 2468 |
| 7 | 2409 | 27 | 2429 | 47 | 2449 | 67 | 2469 |
| 8 | 2410 | 28 | 2430 | 48 | 2450 | 68 | 2470 |
| 9 | 2411 | 29 | 2431 | 49 | 2451 | 69 | 2471 |
| 10 | 2412 | 30 | 2432 | 50 | 2452 | 70 | 2472 |
| 11 | 2413 | 31 | 2433 | 51 | 2453 | 71 | 2473 |
| 12 | 2414 | 32 | 2434 | 52 | 2454 | 72 | 2474 |
| 13 | 2415 | 33 | 2435 | 53 | 2455 | 73 | 2475 |
| 14 | 2416 | 34 | 2436 | 54 | 2456 | 74 | 2476 |
| 15 | 2417 | 35 | 2437 | 55 | 2457 | 75 | 2477 |
| 16 | 2418 | 36 | 2438 | 56 | 2458 | 76 | 2478 |
| 17 | 2419 | 37 | 2439 | 57 | 2459 | 77 | 2479 |
| 18 | 2420 | 38 | 2440 | 58 | 2460 | 78 | 2480 |
| 19 | 2421 | 39 | 2441 | 59 | 2461 | --- | --- |

1.1.6 Test Tool and Duty Cycle

| | | |
|-----------------------------------|------------------------------------|-------------------------|
| Test Tool | Smart RF Studio 7, Version: 1.16.1 | |
| Duty Cycle and Duty Factor | Duty Cycle (%) | Duty Factor (dB) |
| | 43.52% | 3.61 |

1.1.7 Power Index of Test Tool

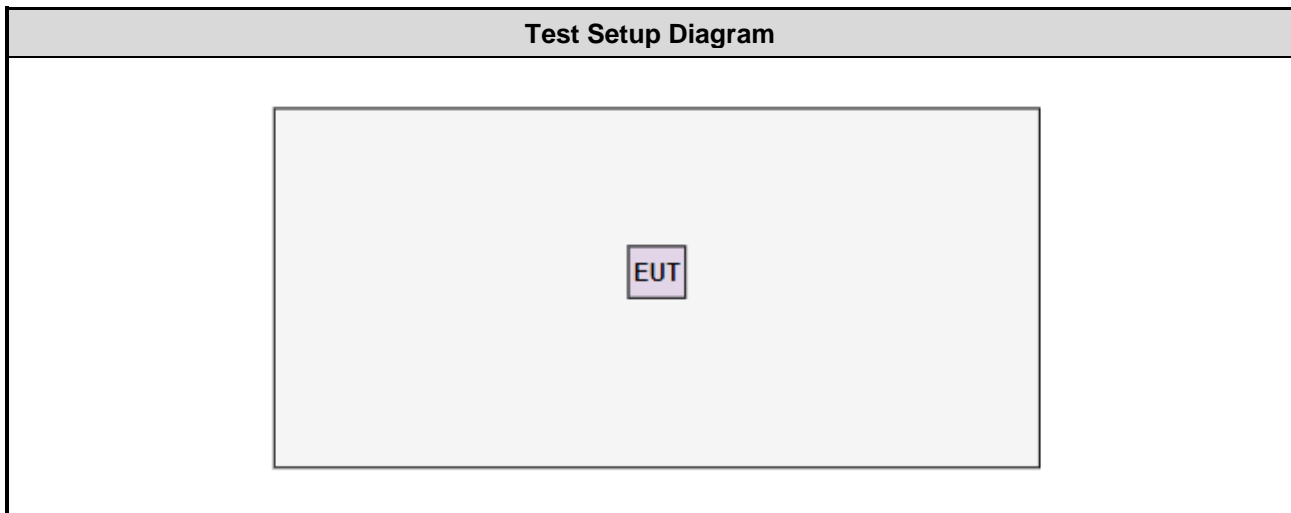
| Modulation Mode | Test Frequency (MHz) | | |
|-----------------|----------------------|------|------|
| | 2402 | 2440 | 2480 |
| GFSK | 0dBm | 0dBm | 0dBm |

1.2 Local Support Equipment List

| Support Equipment List | | | | | |
|------------------------|-----------|-------|---------------|--------|------------------------|
| No. | Equipment | Brand | Model | FCC ID | Remarks |
| 1 | Laptop | DELL | Latitude 5400 | DoC | --- |
| 2 | Fixture | DIGI | SmartRF05EB | --- | Provided by applicant. |

Note: The support laptop and fixture are disconnected from EUT and removed from testing table after sending command from laptop to control EUT to transmit and receive continuously.

1.3 Test Setup Chart



1.4 The Equipment List

| Test Item | Radiated Emission | | | | |
|----------------------------|----------------------------|---------------------------|------------------|------------------|-------------------|
| Test Site | 966 chamber1 / (03CH01-WS) | | | | |
| Tested Date | Nov. 29, 2023 | | | | |
| Instrument | Brand | Model No. | Serial No. | Calibration Date | Calibration Until |
| Receiver | R&S | ESR3 | 101657 | Mar. 03, 2023 | Mar. 02, 2024 |
| Spectrum Analyzer | R&S | FSV40 | 101498 | Nov. 23, 2023 | Nov. 22, 2024 |
| Loop Antenna | R&S | HFH2-Z2 | 100330 | Oct. 31, 2023 | Oct. 30, 2024 |
| Bilog Antenna | SCHWARZBECK | VULB9168 | VULB9168-522 | Jul. 31, 2023 | Jul. 30, 2024 |
| Horn Antenna 1G-18G | SCHWARZBECK | BBHA 9120 D | BBHA 9120 D 1095 | Sep. 01, 2023 | Aug. 31, 2024 |
| Horn Antenna 18G-40G | SCHWARZBECK | BBHA 9170 | BBHA 9170517 | Oct. 30, 2023 | Oct. 29, 2024 |
| Preamplifier | EMC | EMC02325 | 980225 | Jun. 28, 2023 | Jun. 27, 2024 |
| Preamplifier | EMC | EMC118A45SE | 980898 | Jul. 14, 2023 | Jul. 13, 2024 |
| Preamplifier | EMC | EMC184045SE | 980903 | Jul. 17, 2023 | Jul. 16, 2024 |
| Loop Antenna Cable | KOAX KABEL | 101354-BW | 101354-BW | Oct. 03, 2023 | Oct. 02, 2024 |
| LF cable 3M | Woken | CFD400NL-LW | CFD400NL-001 | Oct. 03, 2023 | Oct. 02, 2024 |
| LF cable 11M | EMC | EMCCFD400-NW-N W-11000 | 200801 | Oct. 03, 2023 | Oct. 02, 2024 |
| LF cable 1M | EMC | EMCCFD400-NM-N M-1000 | 160502 | Oct. 03, 2023 | Oct. 02, 2024 |
| RF Cable | EMC | EMC104-35M-35M- 8000 | 210920 | Oct. 03, 2023 | Oct. 02, 2024 |
| RF Cable | EMC | EMC104-35M-35M- 3000 | 210922 | Oct. 03, 2023 | Oct. 02, 2024 |
| HIGHPASS FILTER 3.1-18G | WHK | WHK3.1/18G-10SS | 39 | Oct. 05, 2023 | Oct. 04, 2024 |
| Attenuator | Pasternack | PE7005-10 | 10-1 | Oct. 05, 2023 | Oct. 04, 2024 |
| Measurement Software | Sporton | SENSE-15247_FS | V5.10.8 | NA | NA |
| Measurement Software | Sporton | SENSE-EMI | V5.10.8 | NA | NA |

Note: Calibration Interval of instruments listed above is one year.

1.5 Test Standards

47 CFR FCC Part 15.249
ANSI C63.10-2013

1.6 Deviation from Test Standard and Measurement Procedure

None

1.7 Measurement Uncertainty

The measurement uncertainties given below are based on a 95% confidence level (based on a coverage factor ($k=2$)).

| Measurement Uncertainty | |
|--------------------------------|-----------------|
| Parameters | Uncertainty |
| Bandwidth | ± 34.130 Hz |
| AC conducted emission | ± 2.92 dB |
| Unwanted Emission ≤ 1 GHz | ± 3.41 dB |
| Unwanted Emission > 1 GHz | ± 4.59 dB |

2 Test Configuration

2.1 Testing Facility

| | |
|-----------------------------|--|
| Test Laboratory | International Certification Corporation |
| Test Site | 03CH01-WS |
| Address of Test Site | No.3-1, Lane 6, Wen San 3rd St., Kwei Shan Dist., Tao Yuan City 33381, Taiwan (R.O.C.) |

- FCC Designation No.: TW2732
- FCC site registration No.: 181692
- ISED#: 10807A
- CAB identifier: TW2732

2.2 The Worst Test Modes and Channel Details

| Test item | Mode | Test Frequency (MHz) | Data Rate |
|-------------------------------|------|----------------------|-----------|
| Field Strength of Fundamental | GFSK | 2402, 2440, 2480 | 250 kbps |
| Unwanted Emissions ≤ 1GHz | GFSK | 2402 | 250 kbps |
| Unwanted Emissions > 1GHz | GFSK | 2402, 2440, 2480 | 250 kbps |
| 20dB bandwidth | GFSK | 2402, 2440, 2480 | 250 kbps |

3 Transmitter Test Results

3.1 Unwanted Emission

This section includes field strength of fundamental, field strength of harmonics and emissions radiated outside of the operating frequency bands.

3.1.1 Limit of field strength of fundamental and field strength of harmonics

| Fundamental Frequency | Field strength of fundamental (millivolts/meter) | Field strength of harmonics (microvolts/meter) |
|-----------------------|--|--|
| 2400–2483.5 MHz | 50 | 500 |

3.1.2 Limit of Unwanted Emissions

Emissions radiated outside of the specified frequency bands, except for harmonics, shall be attenuated by at least 50 dB below the level of the fundamental or to the general radiated emission limits in below table, whichever is the lesser attenuation.

| Radiated emission limits | | | |
|--------------------------|-----------------------|-------------------------|----------------------|
| Frequency Range (MHz) | Field Strength (uV/m) | Field Strength (dBuV/m) | Measure Distance (m) |
| 0.009~0.490 | 2400/F(kHz) | 48.5 - 13.8 | 300 |
| 0.490~1.705 | 24000/F(kHz) | 33.8 - 23 | 30 |
| 1.705~30.0 | 30 | 29 | 30 |
| 30~88 | 100 | 40 | 3 |
| 88~216 | 150 | 43.5 | 3 |
| 216~960 | 200 | 46 | 3 |
| Above 960 | 500 | 54 | 3 |

Note 1:

Qusai-Peak value is measured for frequency below 1GHz except for 9–90 kHz, 110–490 kHz frequency band. Peak and average value are measured for frequency above 1GHz. The limit on average radio frequency emission is as above table. The limit on peak radio frequency emissions is 20 dB above the maximum permitted average emission limit

Note 2:

Measurements may be performed at a distance other than what is specified provided. When performing measurements at a distance other than that specified, the results shall be extrapolated to the specified distance using an extrapolation factor as below, Frequency at or above 30 MHz: 20 dB/decade Frequency below 30 MHz: 40 dB/decade.

3.1.3 Test Procedures

1. Measurement is made at a semi-anechoic chamber that incorporates a turntable allowing a EUT rotation of 360°. A continuously-rotating, remotely-controlled turntable is installed at the test site to support the EUT and facilitate determination of the direction of maximum radiation for each EUT emission frequency. The EUT is placed at test table. For emissions testing at or below 1 GHz, the table height is 80 cm above the reference ground plane. For emission measurements above 1 GHz, the table height is 1.5 m
2. Measurement is made with the antenna positioned in both the horizontal and vertical planes of polarization. The measurement antenna is varied in height (1m ~ 4m) above the reference ground plane to obtain the maximum signal strength. Distance between EUT and antenna is 3 m.
3. This investigation is performed with the EUT rotated 360°, the antenna height scanned between 1 m and 4 m, and the antenna rotated to repeat the measurements for both the horizontal and vertical antenna polarizations.

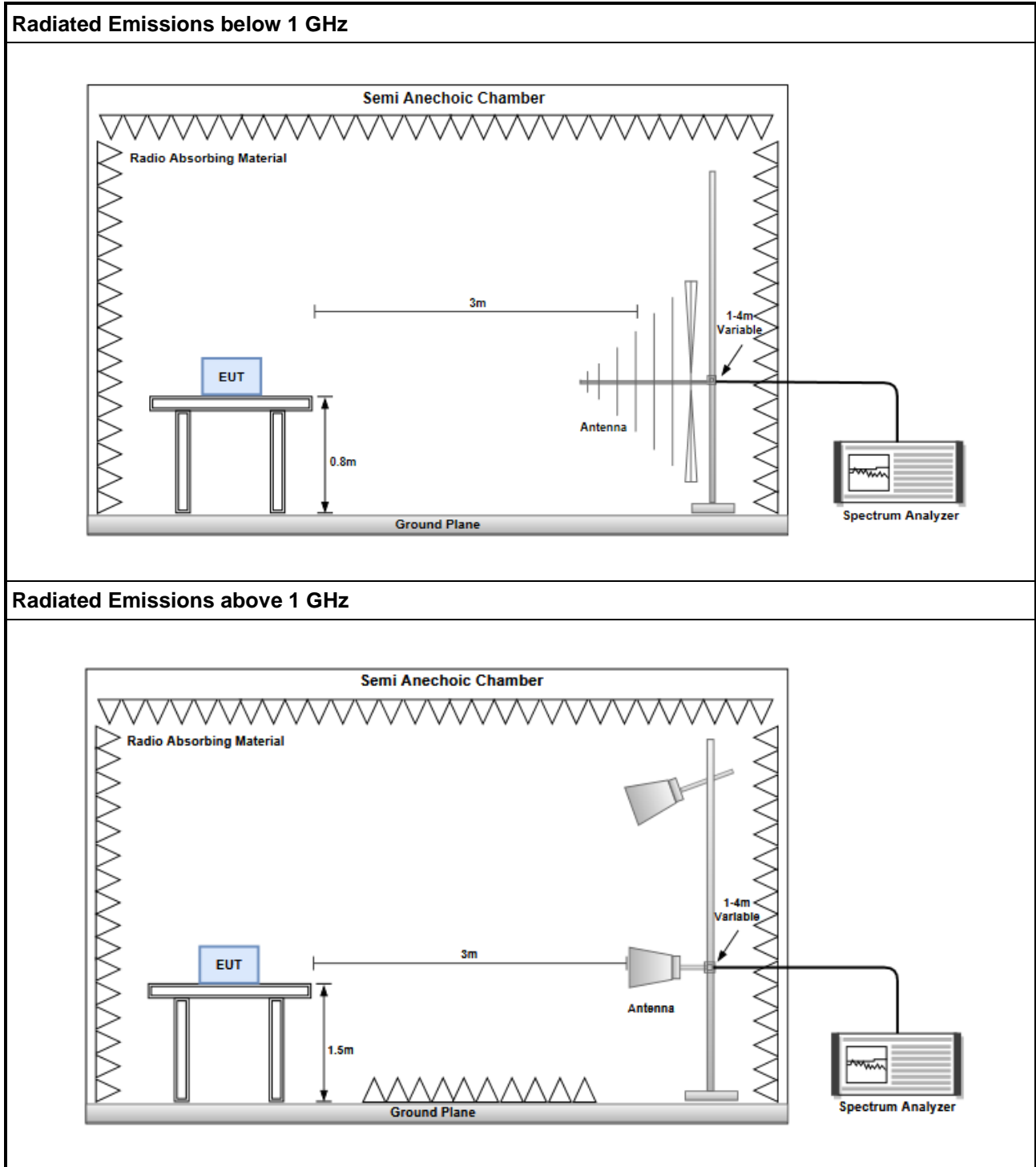
Note:

1. Radiated emission below 1GHz
120kHz measurement bandwidth of test receiver and Quasi-peak detector is for radiated emission
2. Radiated emission above 1GHz / Peak value except fundamental
RBW=1MHz, VBW=3MHz and Peak detector
3. Radiated emission above 1GHz / Average value for field strength of fundamental and harmonics
The average value is: Average = Peak value + 20log(Duty cycle) Where the duty factor is calculated from following formula:

$$20\log(\text{Duty cycle}) = 20\log \frac{0.6261 \times 3 \text{ ms}}{100 \text{ ms}} = -34.52\text{dB}$$

4. Radiated emission above 1GHz / Average value for other emissions
RBW=1MHz, VBW=1/T and Peak detector
5. Radiated emission Peak value for fundamental
RBW=1MHz, VBW=3MHz and Peak detector

3.1.4 Test Setup



3.1.5 Test Results

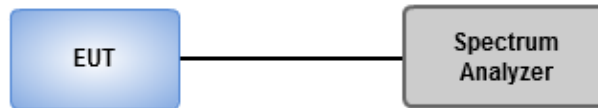
Refer to Appendix A.

3.2 20dB and Occupied Bandwidth

3.2.1 Test Procedures

1. Set resolution bandwidth (RBW) = 10 kHz, Video bandwidth = 30 kHz.
2. Detector = Peak, Trace mode = max hold
3. Sweep = auto couple, Allow the trace to stabilize.
4. Measure the maximum width of the emission that is constrained by the frequencies associated with the two outermost amplitude points (upper and lower) that are attenuated by 20dB relative to the maximum level measured in the fundamental emission.
5. Use the occupied measurement function of spectrum analyzer to measure 99% occupied bandwidth.

3.2.2 Test Setup



3.2.3 Test Results

| | | | |
|--------------------------|------------|------------------|---------|
| Ambient Condition | 23°C / 62% | Tested By | Sean Yu |
|--------------------------|------------|------------------|---------|

Refer to Appendix B.

4 Test laboratory information

Established in 2012, ICC provides foremost EMC & RF Testing and advisory consultation services by our skilled engineers and technicians. Our services employ a wide variety of advanced edge test equipment and one of the widest certification extents in the business.

International Certification Corporation (EMC and Wireless Communication Laboratory), it is our definitive objective is to institute long term, trust-based associations with our clients. The expectation we set up with our clients is based on outstanding service, practical expertise and devotion to a certified value structure. Our passion is to grant our clients with best EMC / RF services by oriented knowledgeable and accommodating staff.

Our Test sites are located at Linkou District and Kwei Shan District. Location map can be found on our website <http://www.icertifi.com.tw>.

Linkou

Tel: 886-2-2601-1640

No.30-2, Ding Fwu Tsuen, Lin Kou
District, New Taipei City, Taiwan
(R.O.C.)

Kwei Shan

Tel: 886-3-271-8666

No.3-1, Lane 6, Wen San 3rd
St., Kwei Shan Dist., Tao Yuan
City 33381, Taiwan (R.O.C.)
No.2-1, Lane 6, Wen San 3rd
St., Kwei Shan Dist., Tao Yuan
City 33381, Taiwan (R.O.C.)

Kwei Shan Site II

Tel: 886-3-271-8640

No.14-1, Lane 19, Wen San 3rd
St., Kwei Shan Dist., Tao Yuan
City 33381, Taiwan (R.O.C.)

If you have any suggestion, please feel free to contact us as below information.

Tel: 886-3-271-8666

Fax: 886-3-318-0345

Email: ICC_Service@icertifi.com.tw

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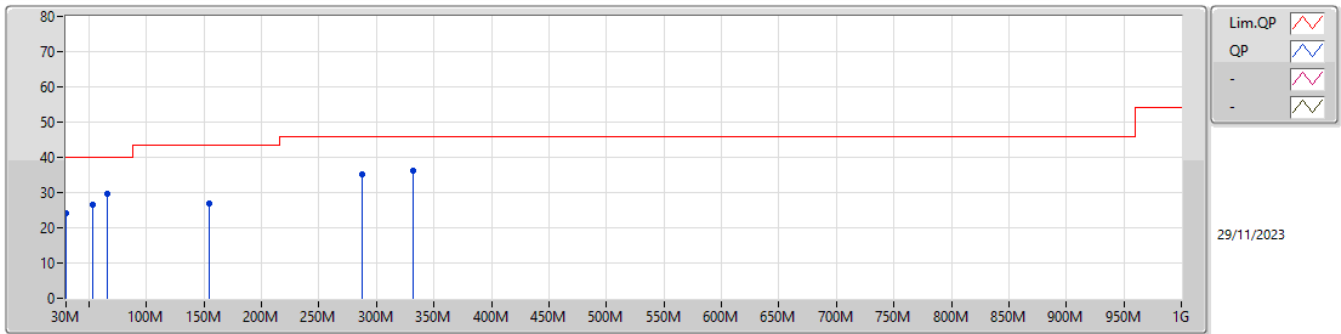


Summary

| Mode | Result | Type | Freq (Hz) | Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Condition |
|-------------|---------------|-------------|----------------------|---------------------------|---------------------------|------------------------|------------------|
| Mode 1 | Pass | PK | 331.8M | 36.22 | 46.00 | -9.78 | Vertical |



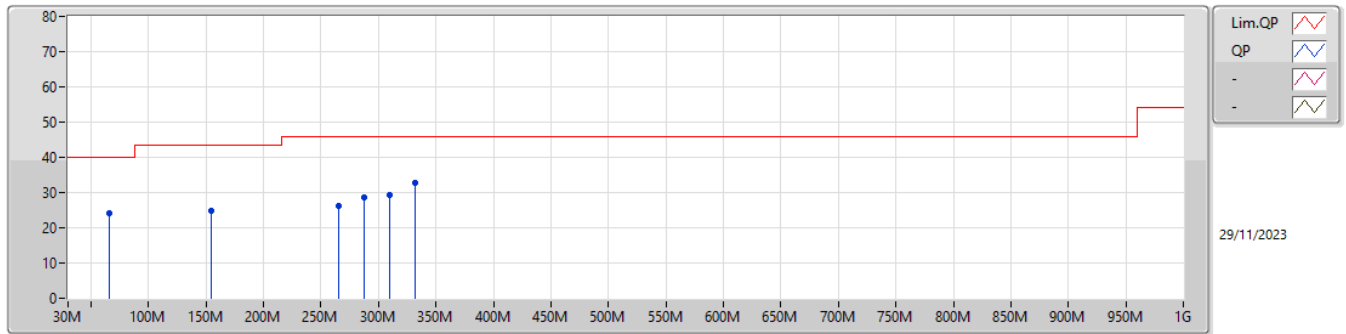
Mode 1



| Type | Freq (Hz) | Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Factor (dB/m) | Dist (m) | Condition | Azimuth (°) | Height (m) | Comment | Raw (dBuV/m) | AF (dB/m) | CL (dB) | PA (dB) |
|------|-----------|----------------|----------------|-------------|---------------|----------|-----------|-------------|------------|---------|--------------|-----------|---------|---------|
| PK | 30.2M | 24.02 | 40.00 | -15.98 | -9.84 | 3 | Vertical | - | - | - | 33.86 | 17.64 | 0.49 | 27.97 |
| PK | 52.9M | 26.64 | 40.00 | -13.36 | -7.95 | 3 | Vertical | - | - | - | 34.59 | 19.50 | 0.65 | 28.10 |
| PK | 66.3M | 29.76 | 40.00 | -10.24 | -10.39 | 3 | Vertical | - | - | - | 40.15 | 17.03 | 0.76 | 28.18 |
| PK | 154.8M | 26.95 | 43.50 | -16.55 | -8.57 | 3 | Vertical | - | - | - | 35.52 | 18.68 | 1.16 | 28.41 |
| PK | 287.5M | 35.09 | 46.00 | -10.91 | -8.31 | 3 | Vertical | - | - | - | 43.40 | 18.50 | 1.61 | 28.42 |
| PK | 331.8M | 36.22 | 46.00 | -9.78 | -7.17 | 3 | Vertical | - | - | - | 43.39 | 19.50 | 1.72 | 28.39 |



Mode 1



| Type | Freq (Hz) | Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Factor (dB/m) | Dist (m) | Condition | Azimuth (°) | Height (m) | Comment | Raw (dBuV/m) | AF (dB/m) | CL (dB) | PA (dB) |
|------|-----------|----------------|----------------|-------------|---------------|----------|------------|-------------|------------|---------|--------------|-----------|---------|---------|
| PK | 66.3M | 23.97 | 40.00 | -16.03 | -10.39 | 3 | Horizontal | - | - | - | 34.36 | 17.03 | 0.76 | 28.18 |
| PK | 154.8M | 24.74 | 43.50 | -18.76 | -8.57 | 3 | Horizontal | - | - | - | 33.31 | 18.68 | 1.16 | 28.41 |
| PK | 265.4M | 26.05 | 46.00 | -19.95 | -9.27 | 3 | Horizontal | - | - | - | 35.32 | 17.62 | 1.54 | 28.43 |
| PK | 287.5M | 28.45 | 46.00 | -17.55 | -8.31 | 3 | Horizontal | - | - | - | 36.76 | 18.50 | 1.61 | 28.42 |
| PK | 309.6M | 29.41 | 46.00 | -16.59 | -7.75 | 3 | Horizontal | - | - | - | 37.16 | 18.98 | 1.68 | 28.41 |
| PK | 331.8M | 32.87 | 46.00 | -13.13 | -7.17 | 3 | Horizontal | - | - | - | 40.04 | 19.50 | 1.72 | 28.39 |



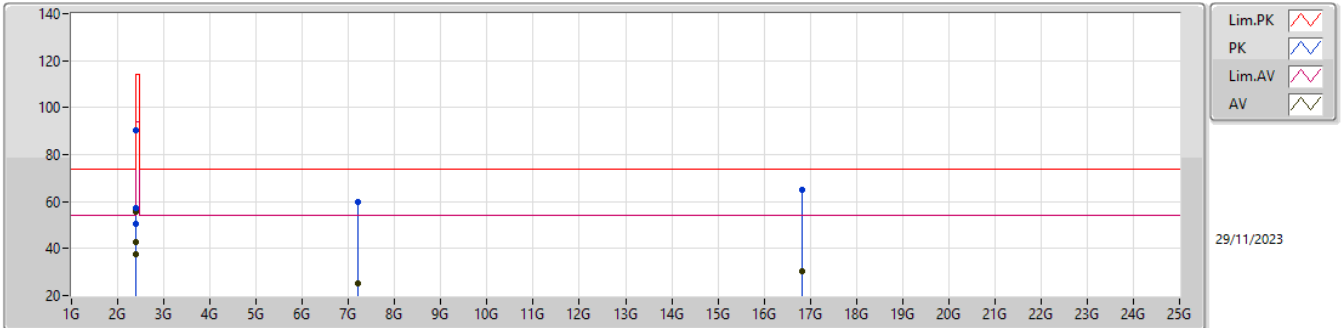
Summary

| Mode | Result | Type | Freq (Hz) | Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Dist (m) | Condition | Azimuth (°) | Height (m) | Comments |
|-------------------|--------|------|-----------|----------------|----------------|-------------|----------|------------|-------------|------------|----------|
| 2.4-2.4835GHz | - | - | - | - | - | - | - | - | - | - | - |
| SRD_1MHz_Nss1_1TX | Pass | AV | 2.4G | 50.14 | 54.00 | -3.86 | 3 | Horizontal | 46 | 1.00 | - |



2.4-2.4835GHz_SRD_1MHz_Nss1_1TX

2402MHz_TX

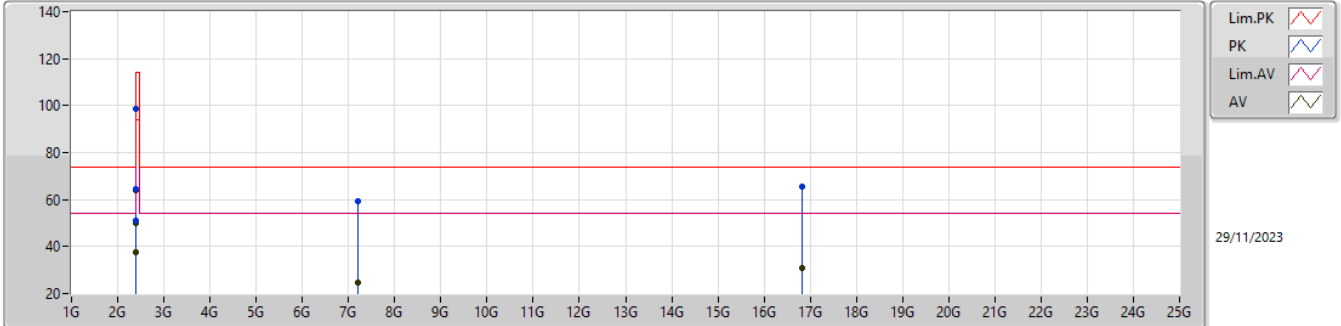


| Type | Freq (Hz) | Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Raw (dBuV) | Dist (m) | Condition | Azimuth (°) | Height (m) | Comment | AF (dB) | CL (dB) | PA (dB) |
|------|-----------|----------------|----------------|-------------|------------|----------|-----------|-------------|------------|---------|---------|---------|---------|
| PK | 2.39G | 50.57 | 74.00 | -23.43 | 54.89 | 3 | Vertical | 146 | 1.00 | - | 27.66 | 4.95 | 36.93 |
| AV | 2.39G | 37.35 | 54.00 | -16.65 | 41.67 | 3 | Vertical | 146 | 1.00 | - | 27.66 | 4.95 | 36.93 |
| PK | 2.4G | 57.41 | 74.00 | -16.59 | 61.78 | 3 | Vertical | 146 | 1.00 | - | 27.60 | 4.96 | 36.93 |
| AV | 2.4G | 42.83 | 54.00 | -11.17 | 47.20 | 3 | Vertical | 146 | 1.00 | - | 27.60 | 4.96 | 36.93 |
| PK | 2.402G | 90.32 | 114.00 | -23.68 | 94.70 | 3 | Vertical | 146 | 1.00 | - | 27.60 | 4.96 | 36.94 |
| AV | 2.402G | 55.80 | 94.00 | -38.20 | - | 3 | Vertical | 146 | 1.00 | - | - | - | - |
| PK | 7.206G | 59.73 | 74.00 | -14.27 | 54.75 | 3 | Vertical | 94 | 1.00 | - | 35.94 | 8.36 | 39.32 |
| AV | 7.206G | 25.21 | 54.00 | -28.79 | - | 3 | Vertical | 94 | 1.00 | - | - | - | - |
| PK | 16.814G | 65.03 | 74.00 | -8.97 | 57.80 | 3 | Vertical | 165 | 1.00 | - | 41.29 | 12.23 | 46.29 |
| AV | 16.814G | 30.51 | 54.00 | -23.49 | - | 3 | Vertical | 165 | 1.00 | - | - | - | - |



2.4-2.4835GHz_SRD_1MHz_Nss1_1TX

2402MHz_TX

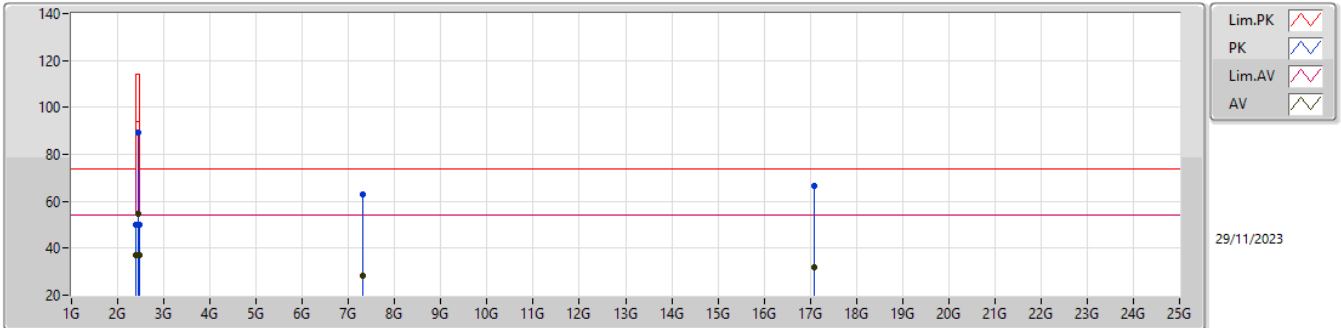


| Type | Freq (Hz) | Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Raw (dBuV) | Dist (m) | Condition | Azimuth (°) | Height (m) | Comment | AF (dB) | CL (dB) | PA (dB) |
|------|-----------|----------------|----------------|-------------|------------|----------|------------|-------------|------------|---------|---------|---------|---------|
| PK | 2.39G | 50.91 | 74.00 | -23.09 | 55.23 | 3 | Horizontal | 46 | 1.00 | - | 27.66 | 4.95 | 36.93 |
| AV | 2.39G | 37.51 | 54.00 | -16.49 | 41.83 | 3 | Horizontal | 46 | 1.00 | - | 27.66 | 4.95 | 36.93 |
| PK | 2.4G | 64.28 | 74.00 | -9.72 | 68.65 | 3 | Horizontal | 46 | 1.00 | - | 27.60 | 4.96 | 36.93 |
| AV | 2.4G | 50.14 | 54.00 | -3.86 | 54.51 | 3 | Horizontal | 46 | 1.00 | - | 27.60 | 4.96 | 36.93 |
| PK | 2.402G | 98.45 | 114.00 | -15.55 | 102.83 | 3 | Horizontal | 46 | 1.00 | - | 27.60 | 4.96 | 36.94 |
| AV | 2.402G | 63.93 | 94.00 | -30.07 | - | 3 | Horizontal | 46 | 1.00 | - | - | - | - |
| PK | 7.206G | 59.34 | 74.00 | -14.66 | 54.36 | 3 | Horizontal | 35 | 1.00 | - | 35.94 | 8.36 | 39.32 |
| AV | 7.206G | 24.82 | 54.00 | -29.18 | - | 3 | Horizontal | 35 | 1.00 | - | - | - | - |
| PK | 16.814G | 65.34 | 74.00 | -8.66 | 58.11 | 3 | Horizontal | 145 | 1.00 | - | 41.29 | 12.23 | 46.29 |
| AV | 16.814G | 30.82 | 54.00 | -23.18 | - | 3 | Horizontal | 145 | 1.00 | - | - | - | - |



2.4-2.4835GHz_SRD_1MHz_Nss1_1TX

2440MHz_TX

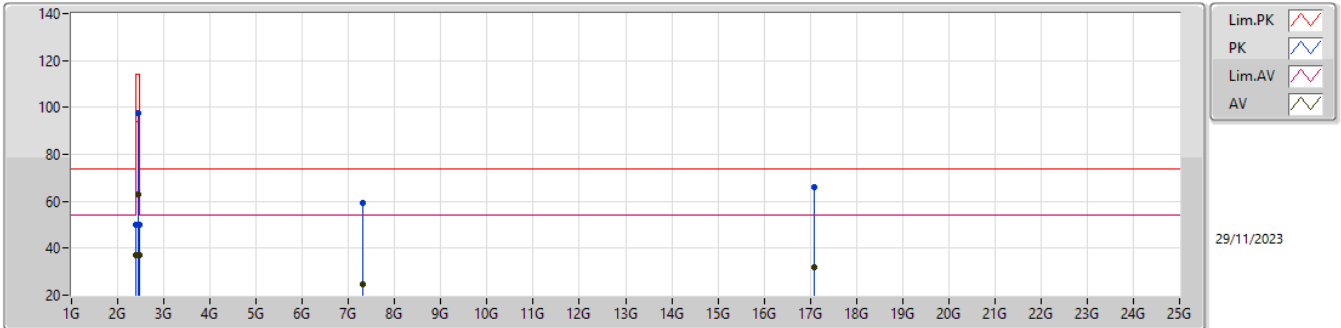


| Type | Freq (Hz) | Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Raw (dBuV) | Dist (m) | Condition | Azimuth (°) | Height (m) | Comment | AF (dB) | CL (dB) | PA (dB) |
|------|-----------|----------------|----------------|-------------|------------|----------|-----------|-------------|------------|---------|---------|---------|---------|
| PK | 2.39G | 50.06 | 74.00 | -23.94 | 54.38 | 3 | Vertical | 147 | 1.00 | - | 27.66 | 4.95 | 36.93 |
| AV | 2.39G | 37.09 | 54.00 | -16.91 | 41.41 | 3 | Vertical | 147 | 1.00 | - | 27.66 | 4.95 | 36.93 |
| PK | 2.4G | 50.06 | 74.00 | -23.94 | 54.43 | 3 | Vertical | 147 | 1.00 | - | 27.60 | 4.96 | 36.93 |
| AV | 2.4G | 37.11 | 54.00 | -16.89 | 41.48 | 3 | Vertical | 147 | 1.00 | - | 27.60 | 4.96 | 36.93 |
| PK | 2.44G | 89.20 | 114.00 | -24.80 | 93.56 | 3 | Vertical | 147 | 1.00 | - | 27.60 | 5.01 | 36.97 |
| AV | 2.44G | 54.68 | 94.00 | -39.32 | - | 3 | Vertical | 147 | 1.00 | - | - | - | - |
| PK | 2.4835G | 50.06 | 74.00 | -23.94 | 54.48 | 3 | Vertical | 147 | 1.00 | - | 27.53 | 5.06 | 37.01 |
| AV | 2.4835G | 37.09 | 54.00 | -16.91 | 41.51 | 3 | Vertical | 147 | 1.00 | - | 27.53 | 5.06 | 37.01 |
| PK | 7.32G | 63.02 | 74.00 | -10.98 | 57.89 | 3 | Vertical | 97 | 1.00 | - | 36.16 | 8.43 | 39.46 |
| AV | 7.32G | 28.50 | 54.00 | -25.50 | - | 3 | Vertical | 97 | 1.00 | - | - | - | - |
| PK | 17.08G | 66.41 | 74.00 | -7.59 | 59.76 | 3 | Vertical | 163 | 1.00 | - | 41.10 | 12.34 | 46.79 |
| AV | 17.08G | 31.89 | 54.00 | -22.11 | - | 3 | Vertical | 163 | 1.00 | - | - | - | - |



2.4-2.4835GHz_SRD_1MHz_Nss1_1TX

2440MHz_TX

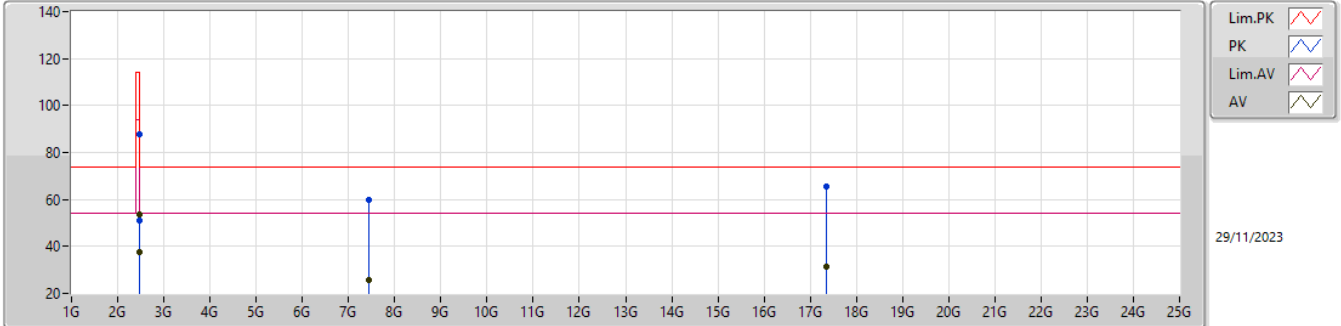


| Type | Freq (Hz) | Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Raw (dBuV) | Dist (m) | Condition | Azimuth (°) | Height (m) | Comment | AF (dB) | CL (dB) | PA (dB) |
|------|-----------|----------------|----------------|-------------|------------|----------|------------|-------------|------------|---------|---------|---------|---------|
| PK | 2.39G | 50.10 | 74.00 | -23.90 | 54.42 | 3 | Horizontal | 54 | 1.00 | - | 27.66 | 4.95 | 36.93 |
| AV | 2.39G | 37.07 | 54.00 | -16.93 | 41.39 | 3 | Horizontal | 54 | 1.00 | - | 27.66 | 4.95 | 36.93 |
| PK | 2.4G | 50.11 | 74.00 | -23.89 | 54.48 | 3 | Horizontal | 54 | 1.00 | - | 27.60 | 4.96 | 36.93 |
| AV | 2.4G | 37.14 | 54.00 | -16.86 | 41.51 | 3 | Horizontal | 54 | 1.00 | - | 27.60 | 4.96 | 36.93 |
| PK | 2.44G | 97.47 | 114.00 | -16.53 | 101.83 | 3 | Horizontal | 54 | 1.00 | - | 27.60 | 5.01 | 36.97 |
| AV | 2.44G | 62.95 | 94.00 | -31.05 | - | 3 | Horizontal | 54 | 1.00 | - | - | - | - |
| PK | 2.4835G | 50.09 | 74.00 | -23.91 | 54.51 | 3 | Horizontal | 54 | 1.00 | - | 27.53 | 5.06 | 37.01 |
| AV | 2.4835G | 37.04 | 54.00 | -16.96 | 41.46 | 3 | Horizontal | 54 | 1.00 | - | 27.53 | 5.06 | 37.01 |
| PK | 7.32G | 59.38 | 74.00 | -14.62 | 54.25 | 3 | Horizontal | 36 | 1.00 | - | 36.16 | 8.43 | 39.46 |
| AV | 7.32G | 24.86 | 54.00 | -29.14 | - | 3 | Horizontal | 36 | 1.00 | - | - | - | - |
| PK | 17.08G | 66.21 | 74.00 | -7.79 | 59.56 | 3 | Horizontal | 141 | 1.00 | - | 41.10 | 12.34 | 46.79 |
| AV | 17.08G | 31.69 | 54.00 | -22.31 | - | 3 | Horizontal | 141 | 1.00 | - | - | - | - |



2.4-2.4835GHz_SRD_1MHz_Nss1_1TX

2480MHz_TX

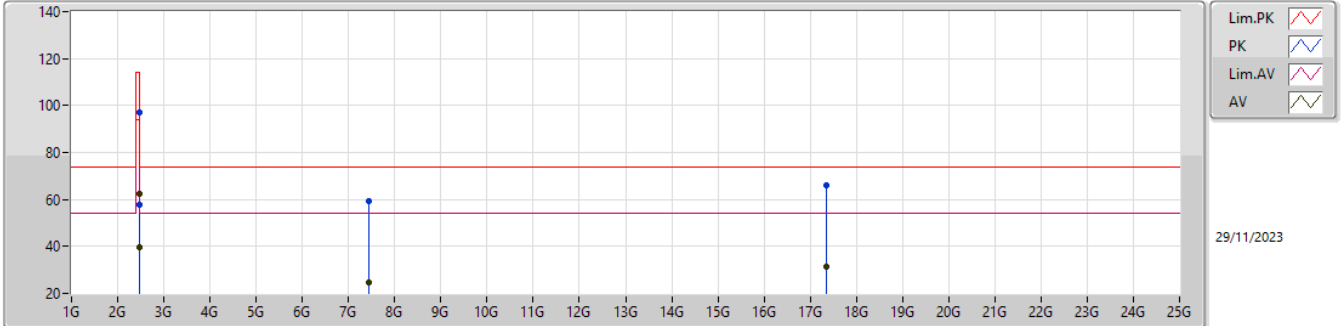


| Type | Freq (Hz) | Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Raw (dBuV) | Dist (m) | Condition | Azimuth (°) | Height (m) | Comment | AF (dB) | CL (dB) | PA (dB) |
|------|-----------|----------------|----------------|-------------|------------|----------|-----------|-------------|------------|---------|---------|---------|---------|
| PK | 2.48G | 87.92 | 114.00 | -26.08 | 92.32 | 3 | Vertical | 147 | 1.00 | - | 27.54 | 5.06 | 37.00 |
| AV | 2.48G | 53.40 | 94.00 | -40.60 | - | 3 | Vertical | 147 | 1.00 | - | - | - | - |
| PK | 2.4835G | 50.93 | 74.00 | -23.07 | 55.35 | 3 | Vertical | 147 | 1.00 | - | 27.53 | 5.06 | 37.01 |
| AV | 2.4835G | 37.68 | 54.00 | -16.32 | 42.10 | 3 | Vertical | 147 | 1.00 | - | 27.53 | 5.06 | 37.01 |
| PK | 7.44G | 60.03 | 74.00 | -13.97 | 54.96 | 3 | Vertical | 98 | 1.00 | - | 36.18 | 8.50 | 39.61 |
| AV | 7.44G | 25.51 | 54.00 | -28.49 | - | 3 | Vertical | 98 | 1.00 | - | - | - | - |
| PK | 17.36G | 65.76 | 74.00 | -8.24 | 58.44 | 3 | Vertical | 162 | 1.00 | - | 42.08 | 12.57 | 47.33 |
| AV | 17.36G | 31.24 | 54.00 | -22.76 | - | 3 | Vertical | 162 | 1.00 | - | - | - | - |

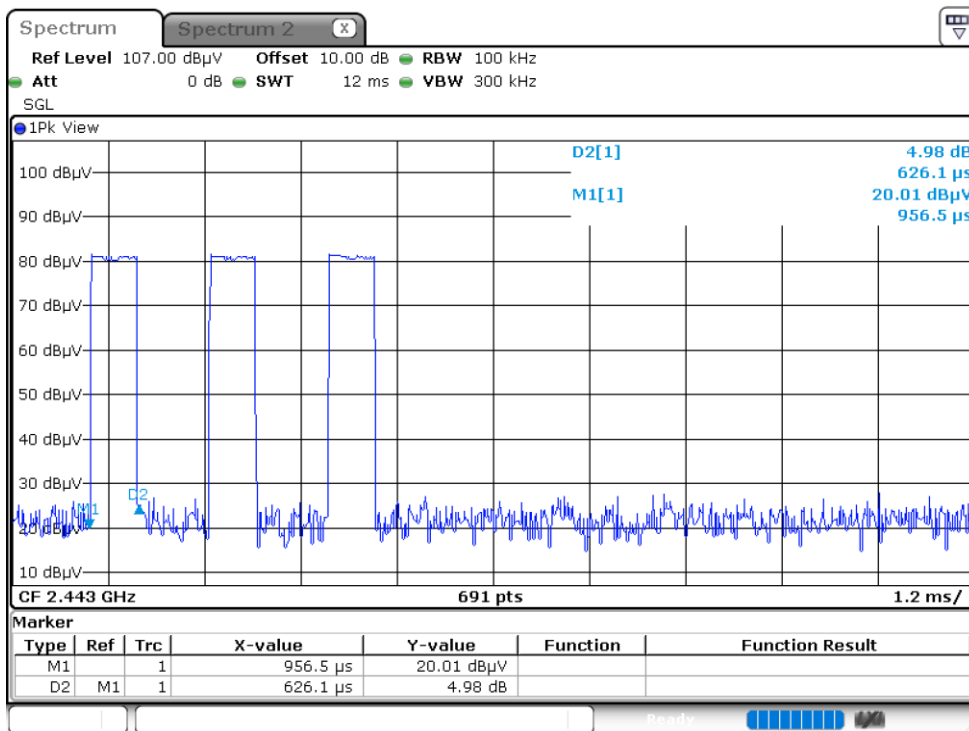
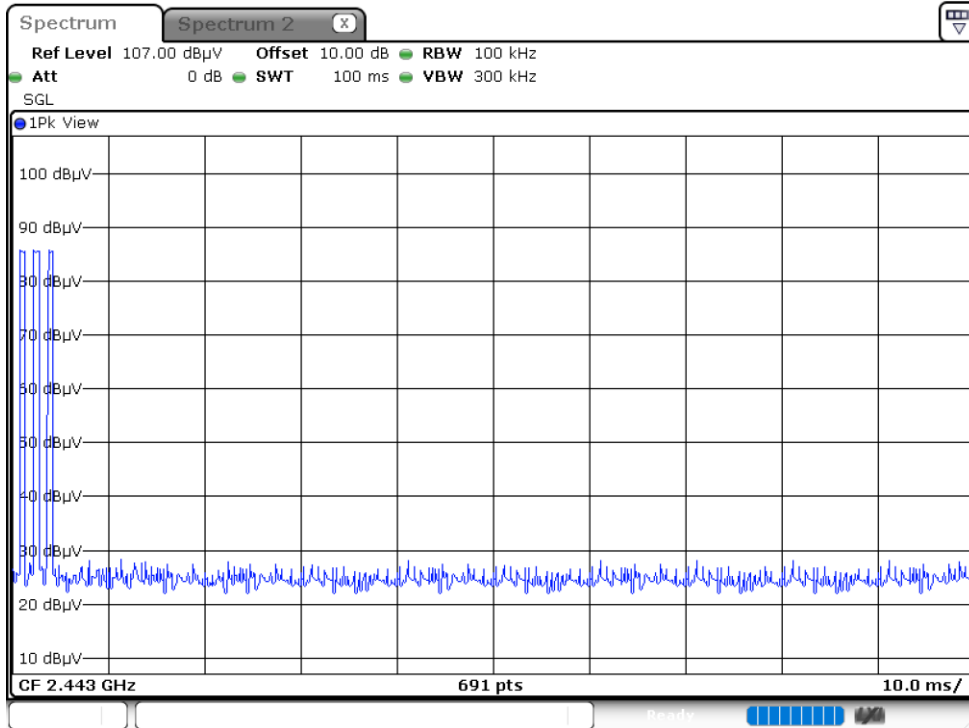


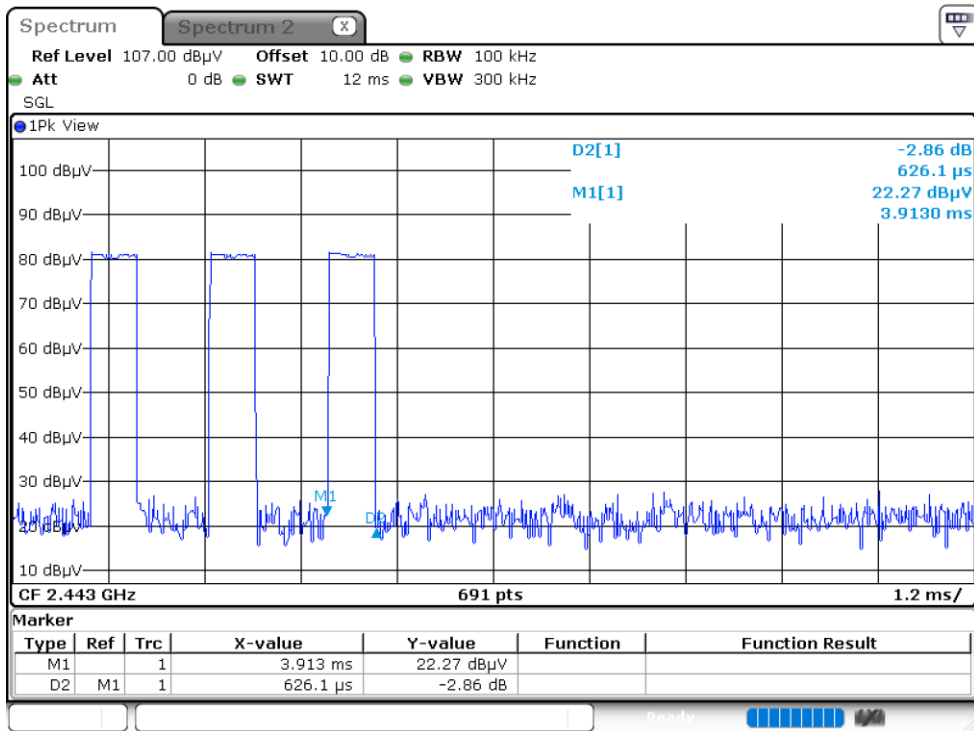
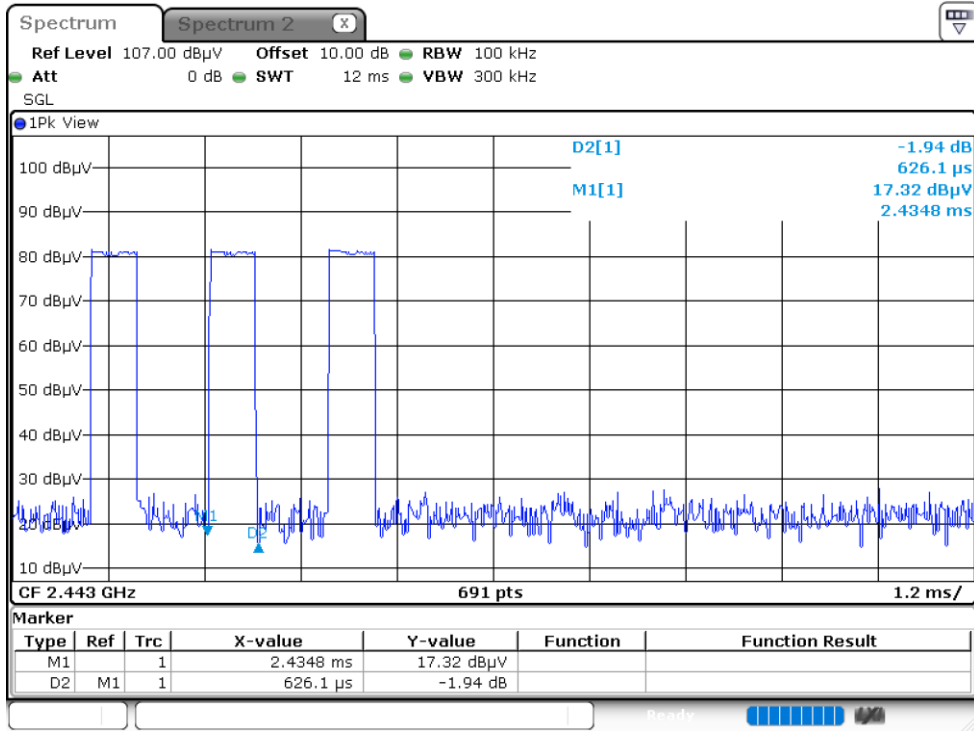
2.4-2.4835GHz_SRD_1MHz_Nss1_1TX

2480MHz_TX



| Type | Freq (Hz) | Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Raw (dBuV) | Dist (m) | Condition | Azimuth (°) | Height (m) | Comment | AF (dB) | CL (dB) | PA (dB) |
|------|-----------|----------------|----------------|-------------|------------|----------|------------|-------------|------------|---------|---------|---------|---------|
| PK | 2.48G | 96.88 | 114.00 | -17.12 | 101.28 | 3 | Horizontal | 47 | 1.00 | - | 27.54 | 5.06 | 37.00 |
| AV | 2.48G | 62.36 | 94.00 | -31.64 | - | 3 | Horizontal | 47 | 1.00 | - | - | - | - |
| PK | 2.4835G | 57.75 | 74.00 | -16.25 | 62.17 | 3 | Horizontal | 47 | 1.00 | - | 27.53 | 5.06 | 37.01 |
| AV | 2.4835G | 39.43 | 54.00 | -14.57 | 43.85 | 3 | Horizontal | 47 | 1.00 | - | 27.53 | 5.06 | 37.01 |
| PK | 7.44G | 59.22 | 74.00 | -14.78 | 54.15 | 3 | Horizontal | 36 | 1.00 | - | 36.18 | 8.50 | 39.61 |
| AV | 7.44G | 24.70 | 54.00 | -29.30 | - | 3 | Horizontal | 36 | 1.00 | - | - | - | - |
| PK | 17.36G | 66.03 | 74.00 | -7.97 | 58.71 | 3 | Horizontal | 143 | 1.00 | - | 42.08 | 12.57 | 47.33 |
| AV | 17.36G | 31.51 | 54.00 | -22.49 | - | 3 | Horizontal | 143 | 1.00 | - | - | - | - |





$$20\log(\text{Duty cycle}) = 20\log \frac{0.6261 \times 3 \text{ ms}}{100 \text{ ms}} = -34.52 \text{ dB}$$



| Frequency (MHz) | 20dB Bandwidth (MHz) | 99% Occupied Bandwidth (MHz) |
|-----------------|----------------------|------------------------------|
| 2402 | 0.282 | 0.265 |
| 2440 | 0.282 | 0.265 |
| 2480 | 0.287 | 0.265 |

