

Tokyo, 108-0075, Japan

ELEMENT WASHINGTON DC LLC

7185 Oakland Mills Road, Columbia, MD 21046 USA Tel. 410.290.6652 / Fax 410.290.6654 http://www.element.com

WLAN/BT/BLE DATA REFERENCING REPORT

Applicant Name: Date of Testing:

 Sony Corporation
 02/08/2023 - 03/03/2023

 1-7-1 Konan
 Test Report Issue Date:

 Minato-ku
 04/17/2023

Test Site/Location:

Element Lab. Columbia, MD, USA

Test Report Serial No.: 1M2302060006-15.PY7

FCC ID: PY7-84558E

APPLICANT: Sony Corporation

Application Type: Certification

EUT Type: Portable Handset Frequency Range (WLAN): 2412-2462MHz Frequency Range (BT/BLE): 2402-2480MHz

Modulation Type (WLAN):CCK, DSSS, OFDM, OFDMAModulation Type (BT)GFSK, $\pi/4$ -DQPSK, 8DPSK

FCC Classification (WLAN/BLE): Digital Transmission System (DTS)

FCC Classification (BT): FCC Part 15 Spread Spectrum Transmitter (DSS)

FCC Rule Part(s): Part 15 Subpart C (15.247)

Test Procedure(s): ANSI C63.10-2013, KDB 484596 D01 v01

This equipment has been shown to be capable of compliance with the applicable technical standards as indicated in the measurement report and was tested in accordance with the measurement procedures specified in §2.947. Test results reported herein relate only to the item(s) tested.

I attest to the accuracy of data. All measurements reported herein were performed by me or were made under my supervision and are correct to the best of my knowledge and belief. I assume full responsibility for the completeness of these measurements and vouch for the qualifications of all persons taking them.

RJ Ortanez

Executive Vice President

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| FCC ID: PY7-84558E | | WLAN/BT/BLE DATA REFERENCING REPORT | | |
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1.0 DATA REFERENCING

1.1 Introduction

The test results presented in this filing reference the Certification test results for FCC ID: PY7-12907W.

Results are referenced from the following test report S/Ns: R14634918-E2 v2, R14634918-E3 v3, R14634918-E4a v3, R14634918-E4b v3

The applicant takes full responsibility to ensure that all referenced test results represent compliance for the equipment under test in this filing.

1.2 Differences Between EUT and Referenced Devices

The equipment under test (EUT) in this filing (FCC ID: PY7-84558E) and the reference device certified under FCC ID: PY7-12907W share a common design. The EUT differs from the reference device with respect to the components and antennas used for licensed (cellular) bands. The components used for 2.4GHz and 5GHz WiFi and BT, including antennas and output power are identical between the EUT and reference device.

1.3 Spot Check Verification Data

In this filing, the worst-case data and spot checks were tested on the EUT as noted below, against the reference device. All the necessary test cases were performed to verify the variant EUT is still in compliance with the spot-checked results to the reference device and was performed using the guidance of ANSI C63.10-2013. Please note that the output power was not compared to the reference device, but to the tune-up to ensure that powers remain within tolerance.

For the EUT in this filing (FCC ID: PY7-84558E), spot checks of the following tests were performed:

- Output Power Measurements
- Radiated Spurious Emission Measurements
- Radiated Band Edge Measurements

Each spot check test on the EUT was performed using the same procedures and settings that were used to perform the test on the corresponding reference device.

In instances where the spot-checked test results are higher than the reference test results, these measurements were found to be noise floor. The difference in noise floor readings is due to variation in system and equipment used.

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Output Power Measurements (Bluetooth)

| | Data | | | | Peak Co | | Avg Cor Pov | |
|--------------------|----------------|------|-----------------|----------------|---------|--------|----------------|--------|
| Frequency [MHz] | Rate [Mbps] | Mod. | Power Scheme | Channel No. | nnel | [mW] | [dBm] | [mW] |
| 2480 | 1.0 | GFSK | ePA | 78 | 13.81 | 24.033 | 13.64 | 23.115 |

Table 1-1. Conducted Output Power Measurements (Bluetooth – Chain0)

| _ | Data | | | | Peak Co | | Avg Cor Pov | |
|--------------------|----------------|------|-----------------|---------|---------|--------|----------------|--------|
| Frequency [MHz] | Rate [Mbps] | Mod. | Power Scheme | Channel | [dBm] | [mW] | [dBm] | [mW] |
| 2480 | 1.0 | GFSK | ePA | 78 | 14.05 | 25.433 | 13.82 | 24.094 |

Table 1-2. Conducted Output Power Measurements (Bluetooth – Chain1)

Output Power Measurements (Bluetooth LE) 1.3.2

| Frequency | Data Rate | Channel | Bluetooth | Peak Conducted Power | | |
|-----------|--------------|---------|-----------|-------------------------|--------|--|
| [MHz] | [Mbps] | No. | Mode | [dBm] | [mW] | |
| 2440 | 2 Mbps | 19 | LE | 10.55 | 11.353 | |

Table 1-3. Conducted Output Power Measurements (Bluetooth (LE) - Chain0)

| | Frequency | Data Rate | Channel Bluetootl | | Peak Conducted Power | | |
|-------|-----------|--------------|-------------------|------|-------------------------|--------|--|
| [MHz] | | [Mbps] | No. | Mode | [dBm] | [mW] | |
| | 2480 | 500 kbps | 39 | LE | 10.50 | 11.218 | |

Table 1-4. Conducted Output Power Measurements (Bluetooth (LE) – Chain1)

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1.3.3 Output Power Measurements (OFDM)

| Freq [MHz] | Channel | Detector | Conducted Power [dBm] | | Conducted Power Limit | Conducted Power | |
|------------|---------|----------|-----------------------|-------|-----------------------|-----------------|-------------|
| | | | ANT1 | ANT2 | MIMO | [dBm] | Margin [dB] |
| 2437 | 6 | AVG | 13.84 | 12.39 | 16.19 | 30.00 | -13.81 |
| | | PEAK | 16.77 | 15.38 | 19.14 | 30.00 | -10.86 |

Table 1-5. Conducted Output Power Measurements MIMO (802.11b)

| Freq [MHz] | Channel | Detector | Power Limit F | | Conducted Power | | |
|------------|---------|----------|---------------|-------|--------------------|-------|-------------|
| | | | ANT1 | ANT2 | MIMO | [dBm] | Margin [dB] |
| 2462 | 11 | AVG | 13.39 | 13.65 | 16.53 | 30.00 | -13.47 |
| | | PEAK | 19.49 | 19.13 | 22.32 | 30.00 | -7.68 |

Table 1-6. Conducted Output Power Measurements MIMO (802.11g)

| Freq [MHz] | Channel | Detector | Cond | lucted Power [| Conducted Power Limit | Conducted Power | | |
|------------|---------|----------|-------|----------------|--------------------------|--------------------|-------------|--|
| | | | ANT1 | ANT2 | MIMO | [dBm] | Margin [dB] | |
| 2412 | 1 | AVG | 13.35 | 13.76 | 16.57 | 30.00 | -13.43 | |
| | | PEAK | 19.40 | 19.77 | 22.60 | 30.00 | -7.40 | |

Table 1-7. Conducted Output Power Measurements MIMO (802.11n)

| FCC ID: PY7-84558E | | WLAN/BT/BLE DATA REFERENCING REPORT | Approved by: Technical Manager |
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Output Power Measurements (OFDMA)

| Freq [MHz] | Channel | Tones | RU Index | Detector | Cond | ucted Power [| Conducted Power | Conducted Power | |
|------------|----------|-------|----------|----------|-------|---------------|-----------------|-----------------|-------------|
| | | | | | ANT1 | ANT2 | MIMO | Limit [dBm] | Margin [dB] |
| 2412 | 4 | 52T | 37 | AVG | 8.55 | 8.19 | 11.38 | 30.00 | -18.62 |
| 2412 | ı | 521 | | PEAK | 16.44 | 16.08 | 19.27 | 30.00 | -10.73 |
| 2462 | 11 | 52T | 40 | AVG | 8.83 | 8.38 | 11.62 | 30.00 | -18.38 |
| 2402 | 11 52T | 321 | 40 | PEAK | 17.09 | 16.86 | 19.99 | 30.00 | -10.01 |

Table 1-8. Conducted Output Power Measurements MIMO (52 Tones)

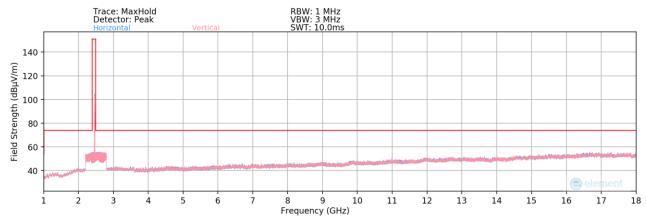
| Freq [MHz] | [MHz] Channel Tones RU Index Detector Conducted Power [dBm] | | | | | | dBm] | Conducted Power | Conducted Power |
|------------|---|------|----|------|-------|-------|-------|-----------------|-----------------|
| | | | | | ANT1 | ANT2 | MIMO | Limit [dBm] | Margin [dB] |
| 2412 | 1 | 242T | 61 | AVG | 8.83 | 8.69 | 11.77 | 30.00 | -18.23 |
| 2412 | • | 2421 | 01 | PEAK | 17.74 | 17.16 | 20.47 | 30.00 | -9.53 |
| 2462 | 11 | 242T | 61 | AVG | 8.97 | 8.68 | 11.84 | 30.00 | -18.16 |
| 2402 | 11 | 2421 | 01 | PEAK | 17.73 | 17.35 | 20.55 | 30.00 | -9.45 |

Table 1-9. Conducted Output Power Measurements MIMO (242 Tones)

| FCC ID: PY7-84558E | | WLAN/BT/BLE DATA REFERENCING REPORT | Approved by: Technical Manager | | |
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1.3.5 Worst Case Radiated Spurious Emissions Measurements



Plot 1-1. Radiated Spurious Plot above 1GHz CDD (802.11b - Ch.6)

Worst Case Mode:

Worst Case Transfer Rate:

Distance of Measurements:

Operating Frequency:

Channel:

802.11b

1Mbps

3 Meters

2437MHz

6

| Frequency [MHz] | Detector | Ant. Pol. [H/V] | Antenna Height [cm] | Turntable Azimuth [degree] | Analyzer Level [dBm] | AFCL [dB/m] | Distance Correction Factor [dB] | Field Strength [dBµV/m] | Limit [dBµV/m] | Margin [dB] |
|--------------------|----------|-----------------------|---------------------------|----------------------------------|----------------------------|----------------|--|-------------------------------|-------------------|----------------|
| 9391.00 | Avg | Н | - | = | -80.57 | 8.68 | 0.00 | 35.11 | 53.98 | -18.87 |
| 9391.00 | Peak | Н | - | - | -68.26 | 8.68 | 0.00 | 47.42 | 73.98 | -26.56 |

Table 1-10. Radiated Measurements CDD

| Marker | Frequency (GHz) | Meter Reading (dBuV) | Det | 206211 (dB/m) | Gain/Loss (dB) | Corrected Reading (dBuV/m) | Avg Limit (dBuV/m) | Margin (dB) | Peak Limit (dBuV/m) | PK Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|--------|--------------------|----------------------------|-----|------------------|-------------------|----------------------------------|-----------------------|----------------|------------------------|----------------------|-------------------|----------------|----------|
| 1 | * ** 2.487 | 37.56 | Pk | 32.3 | -24.5 | 45.36 | 54 | -8.64 | 74 | -28.64 | 0-360 | 101 | Н |
| 2 | * ** 2.669 | 35.34 | Pk | 32 | -25.6 | 41.74 | 54 | -12.26 | 74 | -32.26 | 0-360 | 199 | Н |
| 11 | * ** 1.0005 | 33.4 | Pk | 27.3 | -24.9 | 35.8 | 54 | -18.2 | 74 | -38.2 | 0-360 | 101 | Н |
| 6 | * ** 2.4835 | 33.33 | Pk | 32.3 | -24.3 | 41.33 | 54 | -12.67 | 74 | -32.67 | 0-360 | 101 | V |
| 7 | * ** 2.6975 | 33.32 | Pk | 31.7 | -25.9 | 39.12 | 54 | -14.88 | 74 | -34.88 | 0-360 | 101 | V |
| 3 | * ** 4.15688 | 39.35 | Pk | 33.3 | -31 | 41.65 | 54 | -12.35 | 74 | -32.35 | 0-360 | 101 | Н |
| 4 | * ** 8.14031 | 36.18 | Pk | 35.7 | -26.7 | 45.18 | 54 | -8.82 | 74 | -28.82 | 0-360 | 101 | Н |
| 5 | * ** 9.39123 | 37.16 | PK2 | 36.5 | -25.8 | 47.86 | - | - | 74 | -26.14 | 288 | 315 | Н |
| | * ** 9.38836 | 24.72 | ADV | 36.5 | -26 | 35.22 | 54 | -18.78 | - | - | 288 | 315 | Н |
| 8 | * ** 4.16531 | 37.9 | Pk | 33.3 | -30.9 | 40.3 | 54 | -13.7 | 74 | -33.7 | 0-360 | 199 | V |
| 9 | * ** 8.25844 | 36.36 | Pk | 35.8 | -26.8 | 45.36 | 54 | -8.64 | 74 | -28.64 | 0-360 | 199 | V |
| 10 | * ** 9.30094 | 37.22 | Pk | 36.4 | -25.9 | 47.72 | 54 | -6.28 | 74 | -26.28 | 0-360 | 199 | V |

^{* -} indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

Pk - Peak detector

PK2 - Maximum Peak

ADV - Linear Voltage Average

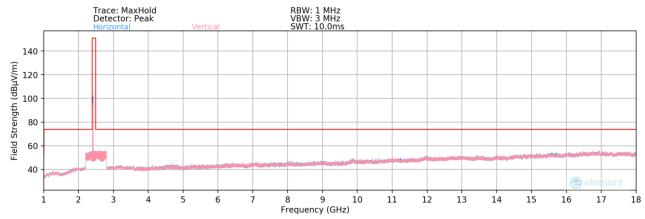
Figure 1-1. Reference Test Results for Table 1-11 (Report No.: R14634918-E4a v3, Page 54)

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^{** -} indicates frequency in Taiwan NCC LP0002 Restricted Band





Plot 1-2. Radiated Spurious Plot above 1GHz MIMO (802.11ax - Ch.1 - 242 Tones)

Worst Case Mode: 802.11ax OFDMA
Worst Case Transfer Rate: MCS0

RU Index: 61
Distance of Measurements: 3 Meters
Operating Frequency: 2412MHz
Channel: 1

| Frequency [MHz] | Detector | Ant. Pol. [H/V] | Antenna Height [cm] | Turntable Azimuth [degree] | Analyzer Level [dBm] | AFCL [dB/m] | Distance Correction Factor [dB] | Field Strength [dBµV/m] | Limit [dBµV/m] | Margin [dB] |
|--------------------|----------|--------------------|---------------------------|----------------------------------|----------------------------|----------------|---------------------------------------|-------------------------------|-------------------|----------------|
| 9056.00 | Avg | Н | - | - | -80.24 | 9.16 | 0.00 | 35.92 | 53.98 | -18.06 |
| 9056.00 | Peak | Н | - | - | -67.72 | 9.16 | 0.00 | 48.44 | 73.98 | -25.54 |

Table 1-11. Radiated Measurements MIMO (242 Tones)

| Marker | Frequency (GHz) | Meter Reading (dBuV) | Det | AT0072 (dB/m) | Gain/Loss (dB) | Corrected Reading (dBuV/m) | Avg Limit (dBuV/m) | Margin (dB) | Peak Limit (dBuV/m) | PK Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|--------|--------------------|----------------------------|-----|------------------|-------------------|----------------------------------|-----------------------|----------------|------------------------|----------------------|-------------------|----------------|----------|
| 1 | * ** 2.814 | 35.69 | Pk | 32.6 | -23.3 | 44.99 | 54 | -9.01 | 74 | -29.01 | 0-360 | 200 | Н |
| 5 | * ** 2.777 | 35.88 | Pk | 32.5 | -23.7 | 44.68 | 54 | -9.32 | 74 | -29.32 | 0-360 | 200 | V |
| 2 | * ** 4.87781 | 38.71 | Pk | 34 | -31.2 | 41.51 | 54 | -12.49 | 74 | -32.49 | 0-360 | 200 | Н |
| 3 | * ** 8.39156 | 38.66 | Pk | 35.8 | -29.4 | 45.06 | 54 | -8.94 | 74 | -28.94 | 0-360 | 101 | Н |
| 4 | * ** 9.05625 | 38.18 | Pk | 36.2 | -28.3 | 46.08 | 54 | -7.92 | 74 | -27.92 | 0-360 | 200 | Н |
| 6 | * ** 5.07844 | 37.79 | Pk | 34.2 | -30.9 | 41.09 | 54 | -12.91 | 74 | -32.91 | 0-360 | 101 | V |
| 7 | * ** 8.39531 | 38.18 | Pk | 35.8 | -29.5 | 44.48 | 54 | -9.52 | 74 | -29.52 | 0-360 | 101 | V |
| 8 | * ** 9.11906 | 38.03 | Pk | 36.3 | -29 | 45.33 | 54 | -8.67 | 74 | -28.67 | 0-360 | 200 | V |

^{* -} indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

Figure 1-2. Reference Test Results for Table 1-12 (Report No.: R14634918-E4b v3, Page 77)

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^{** -} indicates frequency in Taiwan NCC LP0002 Restricted Band

Pk - Peak detector



1.3.6 Worst Case Radiated Band Edge Measurements (OFDM)

Worst Case Mode:

Worst Case Transfer Rate:

Distance of Measurements:

Operating Frequency:

Channel:

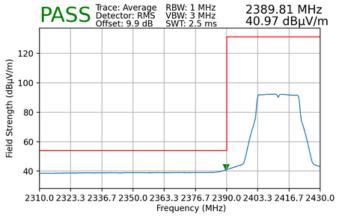
802.11n

MCS0

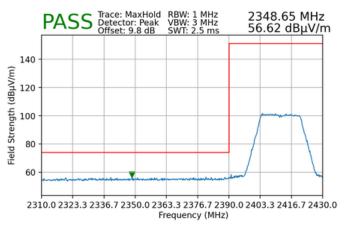
3 Meters

2412MHz

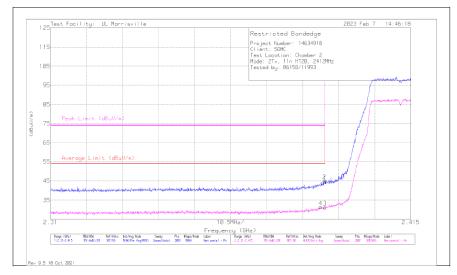
1



Plot 1-3. Radiated Restricted Upper Band Edge Measurement (Average)



Plot 1-4. Radiated Restricted Upper Band Edge Measurement (Peak)



| Marker | Frequency (GHz) | Meter Reading (dBuV) | Det | 206211 (dB/m) | Gain/Loss | Corrected Reading (dBuV/m) | Average Limit | Margin (dB) | Peak Limit (dBuV/m) | PK Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|--------|--------------------|----------------------------|------|------------------|-----------|----------------------------------|---------------|----------------|------------------------|----------------------|-------------------|----------------|----------|
| 1 | * ** 2.38996 | 36.27 | Pk | 32 | -23.8 | 44.47 | - | - | 74 | -29.53 | 51 | 147 | Н |
| 2 | * ** 2.3898 | 36.8 | Pk | 32 | -23.8 | 45 | - | - | 74 | -29 | 51 | 147 | Н |
| 3 | * ** 2.38996 | 23.03 | ADV | 32 | -23.8 | 31.23 | 54 | -22.77 | - | - | 51 | 147 | Н |
| 4 | * ** 2 20075 | 22.25 | A DV | 22 | 22.0 | 21.45 | 5.4 | 22.55 | | | 51 | 147 | н |

^{* -} indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

ADV - Linear Voltage Average

Figure 1-3. Reference Test Results for Plots 1-3 and 1-4 (Report No.: R14634918-E4a v3, Page 61)

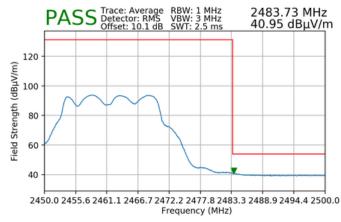
| FCC ID: PY7-84558E | | WLAN/BT/BLE DATA REFERENCING REPORT | Approved by: Technical Manager |
|---------------------|-------------------------|--|-----------------------------------|
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^{** -} indicates frequency in Taiwan NCC LP0002 Restricted Band

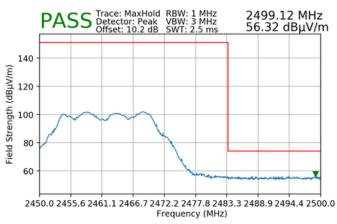
Pk - Peak detector



802.11g Worst Case Mode: Worst Case Transfer Rate: 6Mbps Distance of Measurements: 3 Meters Operating Frequency: 2462MHz Channel: 11



Plot 1-5. Radiated Restricted Lower Band Edge Measurement (Average)



Plot 1-6. Radiated Restricted Lower Band Edge **Measurement (Peak)**



| | Marker | Frequency (GHz) | Meter Reading (dBuV) | Det | 206211 (dB/m) | Gain/Loss (dB) | Corrected Reading (dBuV/m) | Average Limit (dBuV/m) | Margin (dB) | Peak Limit (dBuV/m) | PK Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|---|--------|--------------------|----------------------------|-----|------------------|-------------------|----------------------------------|---------------------------|----------------|------------------------|----------------------|-------------------|----------------|----------|
| | 1 | * ** 2.48354 | 39.25 | Pk | 32.3 | -24.3 | 47.25 | - | - | 74 | -26.75 | 202 | 106 | Н |
| ı | 2 | * ** 2.48364 | 39.19 | Pk | 32.3 | -24.3 | 47.19 | - | - | 74 | -26.81 | 202 | 106 | Н |
| ĺ | 3 | * ** 2.48354 | 25.11 | ADV | 32.3 | -24.3 | 33.11 | 54 | -20.89 | - | - | 202 | 105 | Н |
| | 4 | * ** 2.48369 | 25.83 | ADV | 32.3 | -24.3 | 33.83 | 54 | -20.17 | - | - | 202 | 105 | Н |

^{* -} indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

ADV - Linear Voltage Average

Figure 1-4. Reference Test Results for Plots 1-5 and 1-6 (Report No.: R14634918-E4a v3, Page 59)

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^{** -} indicates frequency in Taiwan NCC LP0002 Restricted Band

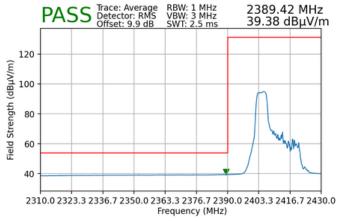
Pk - Peak detector



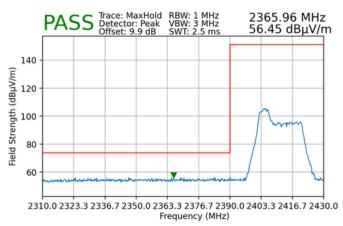
Worst Case Radiated Band Edge Measurements for 802.11ax OFDMA

52 Tones

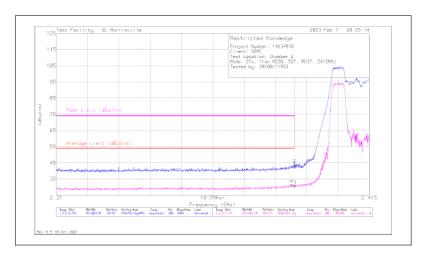
Worst Case Mode: 802.11ax OFDMA Worst Case Transfer Rate: MCS0 RU Index: 37 3 Meters Distance of Measurements: Operating Frequency: 2412MHz Channel:



Plot 1-7. Radiated Restricted Lower Band Edge Measurement (Average - 52 Tones)



Plot 1-8. Radiated Restricted Lower Band Edge Measurement (Peak - 52 Tones)



| Marker | Frequency (GHz) | Meter Reading (dBuV) | Det | 206211 (dB/m) | Gain/Loss (dB) | DC Corr | Corrected Reading (dBuV/m) | Average Limit (dBuV/m) | Margin (dB) | Peak Limit (dBuV/m) | PK Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|--------|--------------------|----------------------------|-----|------------------|-------------------|---------|----------------------------------|------------------------------|----------------|------------------------|----------------------|-------------------|----------------|----------|
| 1 | * ** 2.38996 | 34.5 | Pk | 32 | -23.8 | 0 | 42.7 | - | - | 74 | -31.3 | 200 | 129 | Н |
| 2 | * ** 2.38991 | 35.73 | Pk | 32 | -23.8 | 0 | 43.93 | - | - | 74 | -30.07 | 200 | 129 | Н |
| 3 | * ** 2.38996 | 22.11 | ADV | 32 | -23.8 | .54 | 30.85 | 54 | -23.15 | - | - | 200 | 129 | Н |
| 4 | * ** 2.38886 | 22.79 | ADV | 32 | -23.8 | .54 | 31.53 | 54 | -22.47 | - | - | 200 | 129 | н |

^{* -} indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

Pk - Peak detector ADV - Linear Voltage Average

Figure 1-5. Reference Test Results for Plots 1-9 and 1-10 (Report No.: R14634918-E4a v3, Page 70)

| FCC ID: PY7-84558E | | WLAN/BT/BLE DATA REFERENCING REPORT | Approved by: Technical Manager | |
|---------------------|-------------------------|--|--------------------------------|--|
| Test Report S/N: | Test Dates: | EUT Type: | Dogo 11 of 16 | |
| 1M2302060006-15.PY7 | 02/08/2023 - 03/03/2023 | Portable Handset | Page 11 of 16 | |

^{** -} indicates frequency in Taiwan NCC LP0002 Restricted Band



Worst Case Mode:

Worst Case Transfer Rate:

RU Index:

Distance of Measurements:

Operating Frequency:

Channel:

802.11ax

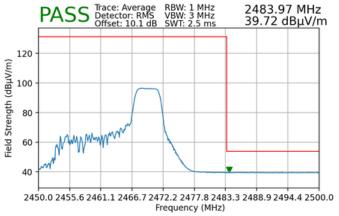
MCS0

40

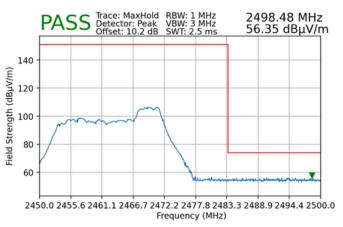
3 Meters

2462MHz

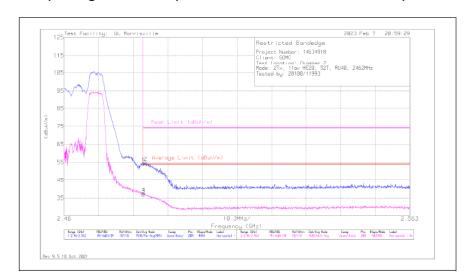
11



Plot 1-9. Radiated Restricted Upper Band Edge Measurement (Average – 52 Tones)



Plot 1-10. Radiated Restricted Upper Band Edge Measurement (Peak – 52 Tones)



| Marker | Frequency (GHz) | Meter Reading (dBuV) | Det | 206211 (dB/m) | Gain/Loss (dB) | DC Corr (dB) | Corrected Reading (dBuV/m) | Average Limit (dBuV/m) | Margin (dB) | Peak Limit (dBuV/m) | PK Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|--------|--------------------|----------------------------|-----|------------------|-------------------|-----------------|----------------------------------|------------------------------|----------------|------------------------|----------------------|-------------------|----------------|----------|
| 1 | * ** 2.48354 | 46.32 | Pk | 32.3 | -24.3 | 0 | 54.32 | - | - | 74 | -19.68 | 146 | 101 | Н |
| 2 | * ** 2.48421 | 47.01 | Pk | 32.3 | -24.4 | 0 | 54.91 | - | - | 74 | -19.09 | 146 | 101 | Н |
| 3 | * ** 2.48354 | 28.34 | ADV | 32.3 | -24.3 | .54 | 36.88 | 54 | -17.12 | - | - | 146 | 101 | Н |
| 4 | * ** 2.48374 | 29.05 | ADV | 32.3 | -24.3 | .54 | 37.59 | 54 | -16.41 | - | - | 146 | 101 | Н |

^{* -} indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

ADV - Linear Voltage Average

Figure 1-6. Reference Test Results for Plots 1-11 and 1-12 (Report No.: R14634918-E4a v3, Page 72)

| FCC ID: PY7-84558E | | WLAN/BT/BLE DATA REFERENCING REPORT | Approved by: Technical Manager |
|---------------------|-------------------------|--|-----------------------------------|
| Test Report S/N: | Test Dates: | EUT Type: | Page 12 of 16 |
| 1M2302060006-15.PY7 | 02/08/2023 - 03/03/2023 | Portable Handset | rage 12 01 10 |

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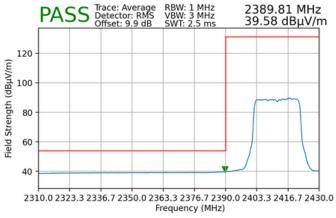
^{** -} indicates frequency in Taiwan NCC LP0002 Restricted Band

Pk - Peak detector

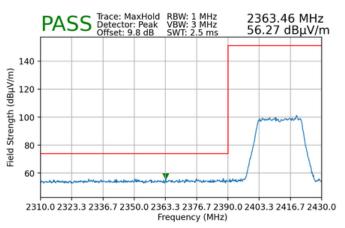


242 Tones

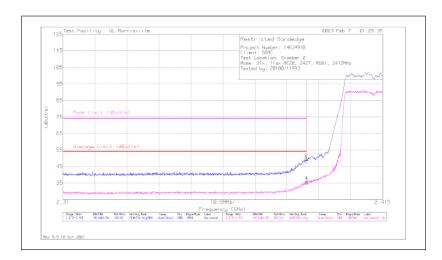
Worst Case Mode: 802.11ax Worst Case Transfer Rate: MCS₀ RU Index: 61 Distance of Measurements: 3 Meters Operating Frequency: 2412MHz Channel: 1



Plot 1-11. Radiated Restricted Lower Band Edge Measurement (Average - 242 Tones)



Plot 1-12. Radiated Restricted Lower Band Edge Measurement (Peak - 242 Tones)



| Marker | Frequency (GHz) | Meter Reading (dBuV) | Det | 206211 (dB/m) | Gain/Loss (dB) | DC Corr | Corrected Reading (dBuV/m) | Limit | Margin (dB) | Peak Limit (dBuV/m) | PK Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|--------|--------------------|----------------------------|-----|------------------|-------------------|---------|----------------------------------|-------|----------------|------------------------|----------------------|-------------------|----------------|----------|
| 1 | * ** 2.38996 | 40.2 | Pk | 32 | -23.8 | 0 | 48.4 | - | - | 74 | -25.6 | 143 | 124 | Н |
| 2 | * ** 2.38991 | 41.52 | Pk | 32 | -23.8 | 0 | 49.72 | - | - | 74 | -24.28 | 143 | 124 | H |
| 3 | * ** 2.38996 | 26.18 | ADV | 32 | -23.8 | .57 | 34.95 | 54 | -19.05 | - | - | 143 | 124 | Н |
| 4 | * ** 2.38991 | 27.22 | ADV | 32 | -23.8 | .57 | 35.99 | 54 | -18.01 | - | - | 143 | 124 | н |

⁻ indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

ADV - Linear Voltage Average

Figure 1-7. Reference Test Results for Plots 1-13 and 1-14 (Report No.: R14634918-E4a v3, Page 84)

| FCC ID: PY7-84558E | | WLAN/BT/BLE DATA REFERENCING REPORT | Approved by: Technical Manager |
|---------------------|-------------------------|--|-----------------------------------|
| Test Report S/N: | Test Dates: | EUT Type: | Page 13 of 16 |
| 1M2302060006-15.PY7 | 02/08/2023 - 03/03/2023 | Portable Handset | rage 13 01 10 |

^{** -} indicates frequency in Taiwan NCC LP0002 Restricted Band

Pk - Peak detector



Worst Case Mode:

Worst Case Transfer Rate:

RU Index:

Distance of Measurements:

Operating Frequency:

Channel:

802.11ax

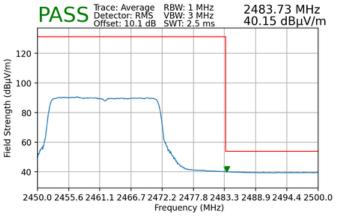
MCS0

61

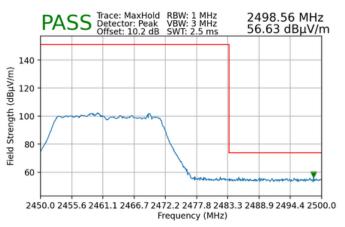
3 Meters

2462MHz

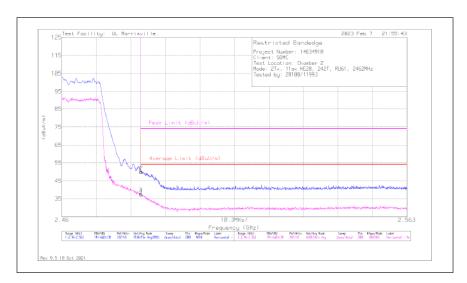
11



Plot 1-13. Radiated Restricted Upper Band Edge Measurement (Average – 242 Tones)



Plot 1-14. Radiated Restricted Upper Band Edge Measurement (Peak – 242 Tones)



| Marker | Frequency (GHz) | Meter Reading (dBuV) | Det | 206211 (dB/m) | Gain/Loss (dB) | DC Corr | Corrected Reading (dBuV/m) | Average Limit (dBuV/m) | Margin (dB) | Peak Limit (dBuV/m) | PK Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|--------|--------------------|----------------------------|-----|------------------|-------------------|---------|----------------------------------|------------------------------|----------------|------------------------|----------------------|-------------------|----------------|----------|
| 1 | * ** 2.48354 | 42.07 | Pk | 32.3 | -24.3 | 0 | 50.07 | - | - | 74 | -23.93 | 147 | 116 | Н |
| 2 | * ** 2.48364 | 42.15 | Pk | 32.3 | -24.3 | 0 | 50.15 | - | - | 74 | -23.85 | 147 | 116 | Н |
| 3 | * ** 2.48354 | 29.24 | ADV | 32.3 | -24.3 | .57 | 37.81 | 54 | -16.19 | - | - | 147 | 116 | Н |
| 4 | * ** 2 48369 | 28.76 | ADV | 32.3 | -24 3 | 57 | 37 33 | 54 | -16 67 | _ | - | 147 | 116 | н |

^{* -} indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

Pk - Peak detector

ADV – Linear Voltage Average

Figure 1-8. Reference Test Results for Plots 1-15 and 1-16 (Report No.: R14634918-E4a v3, Page 86)

| FCC ID: PY7-84558E | | WLAN/BT/BLE DATA REFERENCING REPORT | Approved by: Technical Manager |
|---------------------|-------------------------|--|-----------------------------------|
| Test Report S/N: | Test Dates: | EUT Type: | Dogo 14 of 16 |
| 1M2302060006-15.PY7 | 02/08/2023 - 03/03/2023 | Portable Handset | Page 14 of 16 |

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^{** -} indicates frequency in Taiwan NCC LP0002 Restricted Band



Reference Section

This section displays the source of referenced data presented for the filing of this EUT.

| FCC Part Section(s) | Test Description | Frequency Range(s) [MHz] | Mode(s) | FCC ID of Referenced Device | Test Report S/N (Referenced Device) | Section (Referenced Device) |
|------------------------|--|--------------------------------|-----------|-----------------------------------|---|--------------------------------|
| 15.247(a)(1)(iii) | 20dB Bandwidth | 2402-2480 | Bluetooth | PY7-12907W | R14634918-E2 v2 | 9.2 |
| 15.247(b)(1) | Peak Transmitter Output Power | 2402-2480 | Bluetooth | PY7-12907W | R14634918-E2 v2 | 9.6, 9.7 |
| 15.247(a)(1) | Channel Separation | 2402-2480 | Bluetooth | PY7-12907W | R14634918-E2 v2 | 9.3 |
| 15.247(a)(1)(iii) | Number of Channels | 2402-2480 | Bluetooth | PY7-12907W | R14634918-E2 v2 | 9.4 |
| 15.247(a)(1)(iii) | Time Occupancy | 2402-2480 | Bluetooth | PY7-12907W | R14634918-E2 v2 | 9.5 |
| 15.247(d) | Band Edge / Out-of-band Emissions | 2402-2480 | Bluetooth | PY7-12907W | R14634918-E2 v2 | 9.8 |
| 15.205 15.209 | General Field Strength Limits (Restricted Bands and Radiated Emission Limits) | 2402-2480 | Bluetooth | PY7-12907W | R14634918-E2 v2 | 10 |

Table 1-12. Cross-Referenced Data for Bluetooth

| FCC Part Section(s) | Test Description | Frequency Range(s) [MHz] | Mode(s) | FCC ID of Referenced Device | Test Report S/N (Referenced Device) | Section (Referenced Device) |
|------------------------|--|--------------------------------|--------------|-----------------------------------|---|--------------------------------|
| 15.247(a)(2) | 6dB Bandwidth | 2402-2480 | Bluetooth LE | PY7-12907W | R14634918-E3 v3 | 9.2 |
| 15.247(b)(3) | Transmitter Output Power | 2402-2480 | Bluetooth LE | PY7-12907W | R14634918-E3 v3 | 9.3, 9.4 |
| 15.247(e) | Transmitter Power Spectral Density | 2402-2480 | Bluetooth LE | PY7-12907W | R14634918-E3 v3 | 9.5 |
| 15.247(d) | Band Edge / Out-of-band Emissions | 2402-2480 | Bluetooth LE | PY7-12907W | R14634918-E3 v3 | 9.6 |
| 15.205 15.209 | General Field Strength Limits (Restricted Bands and Radiated Emission Limits) | 2402-2480 | Bluetooth LE | PY7-12907W | R14634918-E3 v3 | 10 |

Table 1-13. Cross-Referenced Data for Bluetooth LE

| FCC ID: PY7-84558E | | WLAN/BT/BLE DATA REFERENCING REPORT | | |
|---------------------|-------------------------|--|---------------|--|
| Test Report S/N: | Test Dates: | EUT Type: | Dogg 45 of 46 | |
| 1M2302060006-15.PY7 | 02/08/2023 - 03/03/2023 | Portable Handset | Page 15 of 16 | |



| FCC Part Section(s) | Test Description | Frequency Range(s) [MHz] | Mode(s) | FCC ID of Referenced Device | Test Report S/N (Referenced Device) | Section (Referenced Device) |
|------------------------|--|--------------------------------|-------------|-----------------------------------|---|--------------------------------|
| 15.247(a)(2) | 6dB Bandwidth | 2402-2482 | 802.11b/g/n | PY7-12907W | R14634918-E4a v3 | 9.2 |
| 15.247(b)(3) | Transmitter Output Power | 2402-2482 | 802.11b/g/n | PY7-12907W | R14634918-E4a v3 | 9.3, 9.4 |
| 15.247(e) | Transmitter Power Spectral Density | 2402-2482 | 802.11b/g/n | PY7-12907W | R14634918-E4a v3 | 9.5 |
| 15.247(d) | Band Edge / Out-of-band Emissions | 2402-2482 | 802.11b/g/n | PY7-12907W | R14634918-E4a v3 | 9.6 |
| 15.205 15.209 | General Field Strength Limits (Restricted Bands and Radiated Emission Limits) | 2402-2482 | 802.11b/g/n | PY7-12907W | R14634918-E4a v3 | 10.1 |

Table 1-14. Cross-Referenced Data for WLAN OFDM

| FCC Part Section(s) | Test Description | Frequency Range(s) [MHz] | Mode(s) | FCC ID of Referenced Device | Test Report S/N (Referenced Device) | Section (Referenced Device) |
|------------------------|--|--------------------------------|----------|-----------------------------------|---|--------------------------------|
| 15.247(a)(2) | 6dB Bandwidth | 2402-2482 | 802.11ax | PY7-12907W | R14634918-E4b v3 | 9.2 |
| 15.247(b)(3) | Transmitter Output Power | 2402-2482 | 802.11ax | PY7-12907W | R14634918-E4b v3 | 9.5, 9.6 |
| 15.247(e) | Transmitter Power Spectral Density | 2402-2482 | 802.11ax | PY7-12907W | R14634918-E4b v3 | 9.3 |
| 15.247(d) | Band Edge / Out-of-band Emissions | 2402-2482 | 802.11ax | PY7-12907W | R14634918-E4b v3 | 9.4 |
| 15.205 15.209 | General Field Strength Limits (Restricted Bands and Radiated Emission Limits) | 2402-2482 | 802.11ax | PY7-12907W | R14634918-E4b v3 | 10 |

Table 1-15. Cross-Referenced Data for WLAN OFDMA

| FCC ID: PY7-84558E | | Approved by: Technical Manager | | |
|---------------------|-------------------------|--------------------------------|---------------|--|
| Test Report S/N: | Test Dates: | EUT Type: | Page 16 of 16 | |
| 1M2302060006-15.PY7 | 02/08/2023 - 03/03/2023 | Portable Handset | | |