

## FCC Part 15D – Compliance Information

### EUT AND PRODUCT INFORMATION

|                   |                                                              |
|-------------------|--------------------------------------------------------------|
| Type of Equipment | UPCS (DECT 6.0)                                              |
| Applicant Name    | Panasonic Corporation                                        |
| Address           | 1-62, 4-chome, Minoshima, Hakata-ku, Fukuoka, 812-8531 Japan |
| Contact           | Michihito Miyazaki                                           |
| Telephone         | +81-70-1349-4205                                             |
| Email             | miyazaki.michihito@jp.panasonic.com                          |
| Brand Name        | Panasonic                                                    |

|                                          | Base Station                                  | Handset / Portable                            | WRS                                     |
|------------------------------------------|-----------------------------------------------|-----------------------------------------------|-----------------------------------------|
| EUT Type/System                          | <input type="checkbox"/>                      | <input type="checkbox"/>                      | <input checked="" type="checkbox"/>     |
| FCC ID                                   |                                               |                                               | ACJ96NKX-A407                           |
| ISED ID (Canada)                         |                                               |                                               | 216A-KXA407                             |
| Model name                               |                                               |                                               | KX-A407                                 |
| HW Version                               |                                               |                                               | PNLB2816ZAxx                            |
| SW Version                               |                                               |                                               | Ver 00.01                               |
| Maximum Antenna Gain                     |                                               |                                               | 0.5dBi                                  |
| Can the EUT be Initiating Device         | <input type="checkbox"/> YES                  | <input type="checkbox"/> YES                  | <input checked="" type="checkbox"/> YES |
| Does the EUT transmit signaling channels | <input type="checkbox"/> YES                  | <input type="checkbox"/> YES                  | <input checked="" type="checkbox"/> YES |
| Max. # of slots in use simultaneously    |                                               |                                               | 12Slots* 2RF units                      |
| Frequency Band                           | 1921.536 – 1928.448 MHz                       |                                               |                                         |
| Number of RF Channels                    | 5                                             |                                               |                                         |
| Frame Period                             | 10 ms                                         |                                               |                                         |
| Max. Burst length                        | 723us                                         |                                               |                                         |
| Min. Burst Length                        | 390us                                         |                                               |                                         |
| Min. # of System Channels                | 60 (12 duplex channels per RF carrier)        |                                               |                                         |
| Supported DECT Slot Types                | <input checked="" type="checkbox"/> Full Slot | <input checked="" type="checkbox"/> Long Slot | <input type="checkbox"/> Double Slot    |
| Operating Mode                           | <input type="checkbox"/> Simplex              | <input checked="" type="checkbox"/> Duplex    |                                         |

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| ANTENNAS     |                                         |                                             |                                         |                                     |
|--------------|-----------------------------------------|---------------------------------------------|-----------------------------------------|-------------------------------------|
| Base Station | Antenna                                 | Type                                        | Internal                                | External                            |
|              | 1                                       | $\lambda / 2$ Dipole Antenna (for RF1 unit) | <input type="checkbox"/>                | <input checked="" type="checkbox"/> |
|              | 2                                       | $\lambda / 2$ Dipole Antenna (for RF1 unit) | <input checked="" type="checkbox"/>     | <input type="checkbox"/>            |
|              | 3                                       | $\lambda / 2$ Dipole Antenna (for RF2 unit) | <input type="checkbox"/>                | <input checked="" type="checkbox"/> |
|              | 4                                       | $\lambda / 2$ Dipole Antenna (for RF2 unit) | <input checked="" type="checkbox"/>     | <input type="checkbox"/>            |
|              | Does RX and TX use the same antenna(s)? |                                             | <input checked="" type="checkbox"/> Yes | <input type="checkbox"/> No         |
| Handset      | Antenna                                 | Type                                        | Internal                                | External                            |
|              | 1                                       |                                             | <input type="checkbox"/>                | <input type="checkbox"/>            |
|              | 2                                       |                                             | <input type="checkbox"/>                | <input type="checkbox"/>            |
|              | Does RX and TX use the same antenna(s)? |                                             | <input type="checkbox"/> Yes            | <input type="checkbox"/> No         |

| ANTENNA DIVERSITY |         |                                     |                                     |
|-------------------|---------|-------------------------------------|-------------------------------------|
|                   | Antenna | Diversity Supported                 |                                     |
|                   |         | TX                                  | RX                                  |
| Base Station      | 1       | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |
|                   | 2       | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |
|                   | 3       | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |
|                   | 4       | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |
| Handset           | 1       | <input type="checkbox"/>            | <input type="checkbox"/>            |
|                   | 2       | <input type="checkbox"/>            | <input type="checkbox"/>            |

| VOLTAGE AND TEMPERATURE RANGES  |                                                                                                                                                                          |                     |         |
|---------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------|---------|
| VOLTAGES                        | Base Station                                                                                                                                                             | Handset or Portable | WRS     |
| Nominal Voltage                 |                                                                                                                                                                          |                     | 5.5 Vdc |
| Cut-Off Voltage (if applicable) |                                                                                                                                                                          |                     |         |
| POWER SOURCE                    | Type                                                                                                                                                                     | Manufacturer        |         |
| Base Station or WRS             | PNLV236 (AC Adaptor)                                                                                                                                                     | Panasonic           |         |
| Handset (Charger)               |                                                                                                                                                                          |                     |         |
| Connections on Base             | <input type="checkbox"/> PSTN<br><input type="checkbox"/> USB<br><input type="checkbox"/> Ethernet<br><input checked="" type="checkbox"/> Others (please specify) ....RF |                     |         |

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| ANCILLARY EQUIPMENT |                      |
|---------------------|----------------------|
| Description         | AC Adapter           |
| Type                | PNLV236 (AC Adaptor) |
| Manufacturer        | Panasonic            |

| HOST DEVICE  |  |
|--------------|--|
| Description  |  |
| Type         |  |
| Manufacturer |  |

| ADDITIONAL INFORMATION |
|------------------------|
|                        |

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|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                         |                                                                                                                                                                |                                                         |                                        |                                                                                                                                                                |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------|----------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>MANUFACTURERS DECLARATIONS</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                         |                                                                                                                                                                |                                                         |                                        |                                                                                                                                                                |
| <b>FCC part 15.323 (c)(5)</b><br>The applicant declares that the system in this application has more than 20 duplex system access channels defined, and that the system is operating in Least Interfered Channel (LIC) mode in accordance with this section.                                                                                                                                                                                                                                                                                              |                                         |                                                                                                                                                                |                                                         |                                        |                                                                                                                                                                |
| Applicant Agrees                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | <input checked="" type="checkbox"/> Yes | <input type="checkbox"/> No                                                                                                                                    |                                                         |                                        |                                                                                                                                                                |
| <b>FCC part 15.323 (c)(5)</b><br>No device or group of co-operating devices located within 1m of each other shall during any frame period occupy more than 6 MHz of aggregate bandwidth, or alternatively, more than one third of the time and spectrum windows defined by the system.                                                                                                                                                                                                                                                                    |                                         |                                                                                                                                                                |                                                         |                                        |                                                                                                                                                                |
| Applicant Agrees                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | <input checked="" type="checkbox"/> Yes | <input type="checkbox"/> No                                                                                                                                    |                                                         |                                        |                                                                                                                                                                |
| <b>FCC part 15.323 (c)(10)</b><br>The applicant hereby declares that the system in this application <b>does</b> use the criteria of (c)(10) of this section.                                                                                                                                                                                                                                                                                                                                                                                              |                                         |                                                                                                                                                                |                                                         |                                        |                                                                                                                                                                |
| Applicant Agrees                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | <input checked="" type="checkbox"/> Yes | <input type="checkbox"/> No                                                                                                                                    |                                                         |                                        |                                                                                                                                                                |
| <b>FCC part 15.323 (c)(11)</b><br>The applicant hereby declares that system in this application <b>does not</b> use the criteria of (c)(11) of this section.                                                                                                                                                                                                                                                                                                                                                                                              |                                         |                                                                                                                                                                |                                                         |                                        |                                                                                                                                                                |
| Applicant Agrees                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | <input checked="" type="checkbox"/> Yes | <input type="checkbox"/> No                                                                                                                                    |                                                         |                                        |                                                                                                                                                                |
| <b>FCC part 15.323 (c)(12)</b><br>The provisions of (c)(10) or (c)(11) of this section <b>shall not</b> be used to extend the range of spectrum occupied over space or time for the purpose of denying fair access to spectrum to other devices.                                                                                                                                                                                                                                                                                                          |                                         |                                                                                                                                                                |                                                         |                                        |                                                                                                                                                                |
| Applicant Agrees                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | <input checked="" type="checkbox"/> Yes | <input type="checkbox"/> No                                                                                                                                    |                                                         |                                        |                                                                                                                                                                |
| <b>ADDITIONAL REMARKS:</b><br>>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                         |                                                                                                                                                                |                                                         |                                        |                                                                                                                                                                |
| <table style="width: 100%; border: none;"> <tr> <td style="width: 30%; vertical-align: top;"> <b>DECLARED BY:</b><br/><br/>           January 21, 2020<br/><br/>           Date         </td> <td style="width: 30%; vertical-align: top;">           Michihito Miyazaki<br/><br/>           Name (print)         </td> <td style="width: 40%; vertical-align: top;"> <div style="text-align: center;"> <br/>           Signature         </div> </td> </tr> </table> |                                         |                                                                                                                                                                | <b>DECLARED BY:</b><br><br>January 21, 2020<br><br>Date | Michihito Miyazaki<br><br>Name (print) | <div style="text-align: center;"> <br/>           Signature         </div> |
| <b>DECLARED BY:</b><br><br>January 21, 2020<br><br>Date                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | Michihito Miyazaki<br><br>Name (print)  | <div style="text-align: center;"> <br/>           Signature         </div> |                                                         |                                        |                                                                                                                                                                |

## FCC Part 15D – Compliance Information

### About this document

This document specifies the information that is needed to select the correct testcases and test procedures for testing to FCC Part 15D. The form must be completed by the applicant and submitted to Nemko before testing is started.

### Preparation of Equipment for Testing

#### Note (a): Number of samples for testing

The following samples are needed for FCC 15D testing:

##### **RF Conducted Tests:**

One sample with a 50 ohm antenna connector (preferably SMA Female). Only one antenna connector is needed for these tests even if the equipment has more than one antenna.

##### **Monitoring Tests:**

One sample with 50 ohm antenna connectors fitted to all antennas (preferably SMA female). Additionally we need a companion device that will work together with the EUT, the companion device must also have antenna connectors on all antennas.

##### **Radiated Tests:**

One sample with integral antennas. This sample will be used to measure Antenna Gain, Part 15B and Power-Line Conducted tests.

#### Note (b): Burst Mode

All RF tests are performed with the EUT in force transmit, aka burst mode. Software and necessary programming tools must be submitted to Nemko together with the test samples before start of testing.

#### Note (c): Monitoring Tests

Monitoring tests are performed in normal operating mode by establishing a connection from the handset (or the initiating device) to the base station (or the responding device). Most tests are performed by establishing connections from the initiating device to the responding device and observing which channel and/or timeslot is used.

For monitoring tests we need a EUT and a Companion device that both have antenna connectors on all antennas (preferably SMA female, again). Additionally, we need access to the CLK100 signal on the Base Station, this is necessary because some of the tests require that the interferers are synced to the DECT frame.

#### Note (d): Connection to an external power supply

Means of connecting the equipment to an external power supply shall be supplied by the applicant together with the equipment to be tested.

Battery operated equipment shall be supplied with the necessary batteries and chargers. All tests on battery operated equipment will be performed with batteries.

#### Note (e): Test-Mode (Loopback Mode)

Loopback Mode is usually not used for FCC testing.