

## FCC - TEST REPORT

Report Number : **60.790.15.009.02** Date of Issue : June 5, 2015

Model : Giant Neos Sync

Product Type : Bike Computer

Applicant : DAYTON INDUSTRIAL CO., LTD

Address : 2-12 Kwai Fat Road, 11-A Kwai Chung, New Territories, Hong Kong

Production Facility : KENDY Enterprise Ltd

Address : 2-12 Kwai Fat Road, 11-A Kwai Chung, New Territories, Hong Kong

Test Result : ☒ **Positive** ☐ **Negative**

Total pages including Appendices : 44

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## 2 Description of Equipment Under Test

### Description of the Equipment Under Test

|                             |                                                   |
|-----------------------------|---------------------------------------------------|
| Product:                    | Bike Computer                                     |
| Model no.:                  | Giant Neos Sync                                   |
| FCC ID:                     | O4GNEOSSYNC                                       |
| Rating:                     | 3.7VDC (1 x 3.7VDC Internal rechargeable battery) |
| Frequency:                  | 2402MHz-2480MHz                                   |
| Antenna gain:               | 0 dBi                                             |
| Number of operated channel: | 40                                                |
| Modulation:                 | GFSK                                              |

### 3 Summary of Test Standards

| Test Standards |
|----------------|
|----------------|

|                                                                                                                                                       |
|-------------------------------------------------------------------------------------------------------------------------------------------------------|
| FCC Part 15 Subpart C 10-1-13 Edition<br>Federal Communications Commission, PART 15 — Radio Frequency Devices,<br>Subpart C — Unintentional Radiators |
|-------------------------------------------------------------------------------------------------------------------------------------------------------|

## 4 Details about the Test Laboratory

### Site 1

Company name: TÜV SÜD Hong Kong Ltd.  
3/F, West Wing, Lakeside 2,  
10 Science Park West Avenue,  
Science Park, Shatin, Hong Kong

### Site 2

Company name: TÜV SÜD China Ltd.  
Building 12&13 Zhiheng Wisdomland Business Park,  
Nantou Checkpoint Road 2,  
Shenzhen 518052, P.R.China  
FCC Registration Number: 502708

| Emission Tests                                                               |           |
|------------------------------------------------------------------------------|-----------|
| Test Item                                                                    | Test Site |
| <b>FCC Part 15 Subpart C</b>                                                 |           |
| FCC Title 47 Part 15.205, 15.209 & 15.247(d) Spurious Radiated Emission      | Site 2    |
| FCC Title 47 Part 15.207 Conduct Emission                                    | NIL       |
| FCC Title 47 Part 15.247(a)(2) 6dB & 99% Bandwidth                           | Site 2    |
| FCC Title 47 Part 15.247(b) Peak Output Power                                | Site 2    |
| FCC Title 47 Part 2.1051 & 15.247(d) Spurious Emissions at Antenna Terminals | Site 2    |
| FCC Title 47 Part 15.247(d) 100kHz Bandwidth of band edges                   | Site 2    |
| FCC Title 47 Part 15.247(e) Power Spectral Density                           | Site 2    |
| FCC Title 47 Part 15.203 & 15.247(b) Antenna Requirement                     | Site 2    |

## 4.1 Test Equipment Site List

### Radiated emission Test – Site 3

| DESCRIPTION                         | MANUFACTURER    | MODEL NO. | SERIAL NO. | CAL. DUE DATE |
|-------------------------------------|-----------------|-----------|------------|---------------|
| EMI Test Receiver                   | Rohde & Schwarz | ESR 26    | 101269     | 17-Aug-15     |
| Trilog Super Broadband Test Antenna | Schwarzbeck     | VULB 9163 | 707        | 17-Aug-17     |
| Horn Antenna                        | Rohde & Schwarz | HF907     | 102294     | 17-Aug-17     |
| Pre-amplifier                       | Rohde & Schwarz | SCU 18    | 102230     | 17-Aug-15     |
| 3m Semi-anechoic chamber            | TDK             | 9X6X6     | ----       | 29-May-19     |

### 6dB & 99% Bandwidth, Peak Output Power, Spurious Emissions at Antenna Terminals, 100kHz Bandwidth of band edges, Power Spectral Density – Site 3

| DESCRIPTION             | MANUFACTURER    | MODEL NO.       | SERIAL NO.    | CAL. DUE DATE |
|-------------------------|-----------------|-----------------|---------------|---------------|
| Signal Generator        | Rohde & Schwarz | SMB100A         | 108272        | 17-Aug-15     |
| Signal Analyzer         | Rohde & Schwarz | FSV40           | 101030        | 17-Aug-15     |
| Vector Signal Generator | Rohde & Schwarz | SMU 200A        | 105324        | 17-Aug-15     |
| RF Switch Module        | Rohde & Schwarz | OSP120/OSP-B157 | 101226/100851 | 17-Aug-15     |

## 4.2 Measurement System Uncertainty

### Measurement System Uncertainty Emissions

| System Measurement Uncertainty                                      |                                          |
|---------------------------------------------------------------------|------------------------------------------|
| Items                                                               | Extended Uncertainty                     |
| Uncertainty for Radiated Emission in 3m chamber<br>9kHz-30MHz       | 4.54dB                                   |
| Uncertainty for Radiated Emission in 3m chamber<br>30MHz-1000MHz    | Horizontal: 4.83dB;<br>Vertical: 4.91dB; |
| Uncertainty for Radiated Emission in 3m chamber<br>1000MHz-25000MHz | Horizontal: 4.89dB;<br>Vertical: 4.88dB; |
| Uncertainty for Conducted RF test                                   | 2.04dB                                   |

## 5 Summary of Test Results

| Emission Tests                                                               |       |                                     |                          |                                     |
|------------------------------------------------------------------------------|-------|-------------------------------------|--------------------------|-------------------------------------|
| FCC Part 15 Subpart C                                                        |       |                                     |                          |                                     |
| Test Condition                                                               | Pages | Test Result                         |                          |                                     |
|                                                                              |       | Pass                                | Fail                     | N/A                                 |
| FCC Title 47 Part 15.205, 15.209 & 15.247(d) Spurious Radiated Emission      | 10-15 | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>            |
| FCC Title 47 Part 15.207 Conduct Emission                                    | NIL   | <input type="checkbox"/>            | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| FCC Title 47 Part 15.247(a)(2) 6dB & 99% Bandwidth                           | 16-21 | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>            |
| FCC Title 47 Part 15.247(b) Peak Output Power                                | 22-24 | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>            |
| FCC Title 47 Part 2.1051 & 15.247(d) Spurious Emissions at Antenna Terminals | 25-27 | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>            |
| FCC Title 47 Part 15.247(d) 100kHz Bandwidth of band edges                   | 28-31 | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>            |
| FCC Title 47 Part 15.247(e) Power Spectral Density                           | 32-34 | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>            |
| FCC Title 47 Part 15.203 & 15.247(b) Antenna Requirement                     | 35    | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>            |

## 6 General Remarks

### Remarks

NIL

### SUMMARY:

- All tests according to the regulations cited on page 5 were

■ - Performed

□ - **Not** Performed

- The Equipment Under Test

■ - **Fulfills** the general approval requirements.

□ - **Does not** fulfill the general approval requirements.

Sample Received Date: May 14, 2015

Testing Start Date: May 15, 2015

Testing End Date: May 29, 2015

- TÜV SÜD HONG KONG LTD. -

Reviewed by:



TSENG Chi Kit  
EMC Project Engineer



Prepared by:



CHAN Kwong Ngai  
EMC Test Engineer

## 7 Emission Test Results

### 7.1 Spurious Radiated Emission

EUT: GIANT NEOS SYNC  
 Op Condition: Operated, TX Mode (2402MHz)  
 Test Specification: FCC15.205, 15.209 & 15.247(d) Antenna: Horizontal  
 Comment: 3.7VDC  
 Remark: 9kHz to 25GHz

| Test Result                         |            |
|-------------------------------------|------------|
| <input checked="" type="checkbox"/> | Passed     |
| <input type="checkbox"/>            | Not Passed |

| Frequency<br>MHz | Result<br>dBμV/m | Limit<br>dBμV/m | Margin<br>dB | Detector   |
|------------------|------------------|-----------------|--------------|------------|
| 58.736           | 18.05            | 40              | -21.95       | Quasi Peak |
| 69.527           | 17.67            | 40              | -22.33       | Quasi Peak |
| 109.115          | 14.80            | 43.5            | -28.70       | Quasi Peak |
| 1167.800         | 37.44            | 74              | -32.56       | Peak       |
| 2400.000         | 46.18            | 54              | -3.82        | Average    |
| 2438.400         | 39.25            | 74              | -30.75       | Peak       |
| 4803.750         | 65.57            | 74              | -8.43        | Peak       |
| 4803.750         | 39.56            | 54              | -14.44       | Average    |
| 7206.250         | 58.03            | 74              | -15.97       | Peak       |
| 7206.250         | 36.99            | 54              | -17.01       | Average    |

## Spurious Radiated Emission

EUT: GIANT NEOS SYNC  
 Op Condition: Operated, TX Mode (2402MHz)  
 Test Specification: FCC15.205, 15.209 & 15.247(d) Antenna: Vertical  
 Comment: 3.7VDC  
 Remark: 9kHz to 25GHz

### Test Result

☒ Passed

☐ Not Passed

| Frequency<br>MHz | Result<br>dB $\mu$ V/m | Limit<br>dB $\mu$ V/m | Margin<br>dB | Detector   |
|------------------|------------------------|-----------------------|--------------|------------|
| 88.200           | 19.93                  | 43.5                  | -23.57       | Quasi Peak |
| 119.725          | 20.82                  | 43.5                  | -22.68       | Quasi Peak |
| 136.215          | 23.74                  | 43.5                  | -19.76       | Quasi Peak |
| 151.674          | 20.62                  | 43.5                  | -22.88       | Quasi Peak |
| 1173.600         | 39.48                  | 74                    | -34.52       | Peak       |
| 2404.600         | 45.77                  | 74                    | -28.23       | Peak       |
| 2404.600         | 42.91                  | 54                    | -11.09       | Average    |
| 4803.750         | 65.54                  | 74                    | -8.46        | Peak       |
| 4803.750         | 37.76                  | 54                    | -16.24       | Average    |
| 7206.875         | 54.27                  | 74                    | -19.73       | Peak       |
| 7206.875         | 36.80                  | 54                    | -17.20       | Average    |

## Spurious Radiated Emission

EUT: GIANT NEOS SYNC  
 Op Condition: Operated, TX Mode (2440MHz)  
 Test Specification: FCC15.205, 15.209 & 15.247(d) Antenna: Horizontal  
 Comment: 3.7VDC  
 Remark: 9kHz to 25GHz

### Test Result

☒ Passed  
☐ Not Passed

| Frequency<br>MHz | Result<br>dBμV/m | Limit<br>dBμV/m | Margin<br>dB | Detector   |
|------------------|------------------|-----------------|--------------|------------|
| 58.736           | 18.05            | 40              | -21.95       | Quasi Peak |
| 69.527           | 17.67            | 40              | -22.33       | Quasi Peak |
| 109.115          | 14.80            | 43.5            | -28.70       | Quasi Peak |
| 1605.400         | 39.47            | 74              | -34.53       | Peak       |
| 2453.200         | 45.03            | 74              | -28.97       | Peak       |
| 2453.200         | 44.44            | 54              | -9.56        | Average    |
| 4879.375         | 65.19            | 74              | -8.81        | Peak       |
| 4879.375         | 42.17            | 54              | -11.83       | Average    |
| 7320.000         | 60.18            | 74              | -13.82       | Peak       |
| 7320.000         | 39.60            | 54              | -14.40       | Average    |

## Spurious Radiated Emission

EUT: GIANT NEOS SYNC  
 Op Condition: Operated, TX Mode (2440MHz)  
 Test Specification: FCC15.205, 15.209 & 15.247(d) Antenna: Vertical  
 Comment: 3.7VDC  
 Remark: 9kHz to 25GHz

### Test Result

☒ Passed  
☐ Not Passed

| Frequency<br>MHz | Result<br>dBμV/m | Limit<br>dBμV/m | Margin<br>dB | Detector   |
|------------------|------------------|-----------------|--------------|------------|
| 88.200           | 19.93            | 43.5            | -23.57       | Quasi Peak |
| 119.725          | 20.82            | 43.5            | -22.68       | Quasi Peak |
| 136.215          | 23.74            | 43.5            | -19.76       | Quasi Peak |
| 151.674          | 20.62            | 43.5            | -22.88       | Quasi Peak |
| 2145.800         | 42.32            | 74              | -31.68       | Peak       |
| 2556.200         | 41.43            | 54              | -12.57       | Average    |
| 4880.625         | 61.44            | 74              | -12.56       | Peak       |
| 4880.625         | 38.56            | 54              | -15.44       | Average    |
| 7319.375         | 57.45            | 74              | -16.55       | Peak       |
| 7319.375         | 37.25            | 54              | -16.75       | Average    |

## Spurious Radiated Emission

EUT: GIANT NEOS SYNC  
 Op Condition: Operated, TX Mode (2480MHz)  
 Test Specification: FCC15.205, 15.209 & 15.247(d) Antenna: Horizontal  
 Comment: 3.7VDC  
 Remark: 9kHz to 25GHz

### Test Result

☒ Passed  
☐ Not Passed

| Frequency<br>MHz | Result<br>dBμV/m | Limit<br>dBμV/m | Margin<br>dB | Detector   |
|------------------|------------------|-----------------|--------------|------------|
| 58.736           | 18.05            | 40              | -21.95       | Quasi Peak |
| 69.527           | 17.67            | 40              | -22.33       | Quasi Peak |
| 109.115          | 14.80            | 43.5            | -28.70       | Quasi Peak |
| 1599.800         | 46.73            | 74              | -27.27       | Peak       |
| 1599.800         | 45.67            | 54              | -8.33        | Average    |
| 2396.200         | 45.40            | 74              | -28.60       | Peak       |
| 4960.000         | 62.22            | 74              | -11.78       | Peak       |
| 4960.000         | 35.94            | 54              | -8.06        | Average    |
| 7439.375         | 58.90            | 74              | -15.10       | Peak       |
| 7439.375         | 35.20            | 54              | -8.80        | Average    |

## Spurious Radiated Emission

EUT: GIANT NEOS SYNC  
 Op Condition: Operated, TX Mode (2480MHz)  
 Test Specification: FCC15.205, 15.209 & 15.247(d) Antenna: Vertical  
 Comment: 3.7VDC  
 Remark: 9kHz to 25GHz

### Test Result

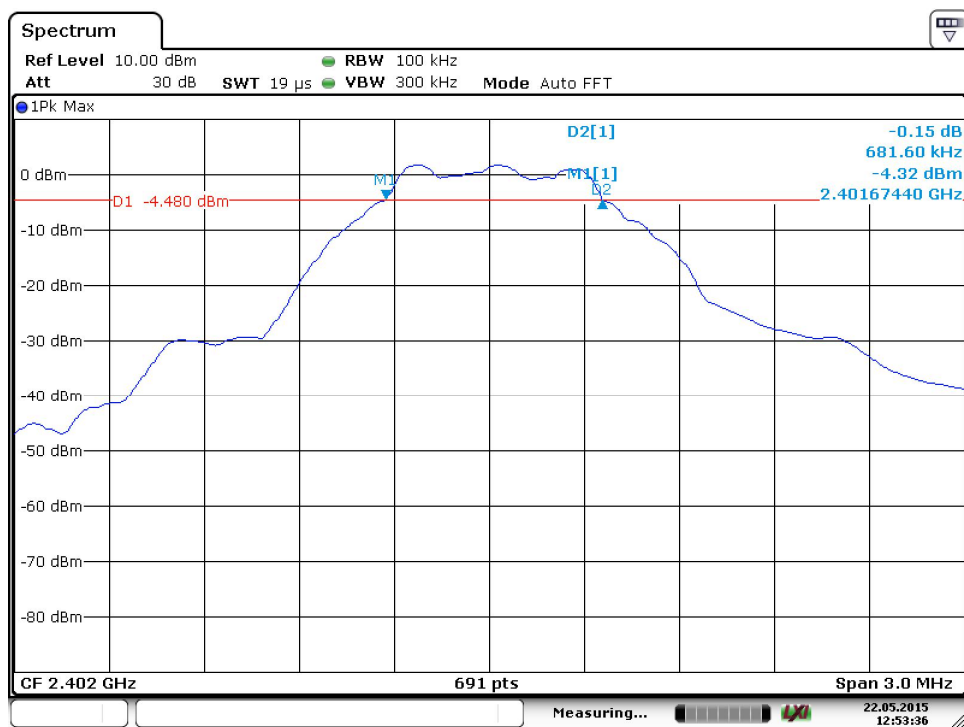
☒ Passed  
☐ Not Passed

| Frequency<br>MHz | Result<br>dBμV/m | Limit<br>dBμV/m | Margin<br>dB | Detector   |
|------------------|------------------|-----------------|--------------|------------|
| 88.200           | 19.93            | 43.5            | -23.57       | Quasi Peak |
| 119.725          | 20.82            | 43.5            | -22.68       | Quasi Peak |
| 136.215          | 23.74            | 43.5            | -19.76       | Quasi Peak |
| 151.674          | 20.62            | 43.5            | -22.88       | Quasi Peak |
| 1198.200         | 39.67            | 74              | -34.33       | Peak       |
| 2612.400         | 39.91            | 74              | -34.09       | Peak       |
| 2612.400         | 38.07            | 54              | -15.93       | Average    |
| 4960.625         | 62.23            | 74              | -11.77       | Peak       |
| 4960.625         | 37.11            | 54              | -16.89       | Average    |
| 7440.000         | 59.22            | 74              | -14.78       | Peak       |
| 7440.000         | 35.08            | 54              | -18.92       | Average    |

## 7.2 6dB & 99% Bandwidth

EUT: GIANT NEOS SYNC  
Op Condition: Operated, TX Mode (2402MHz)  
Test Specification: FCC15.247(a)(2), 6dB Bandwidth  
Comment: 3.7VDC

Test Result

☒ Passed☐ Not Passed

Date: 22.MAY.2015 12:53:36

| 6dB bandwidth | Limit     |
|---------------|-----------|
| 681.600 kHz   | > 500 kHz |

**6dB & 99% Bandwidth**

EUT: GIANT NEOS SYNC  
Op Condition: Operated, TX Mode (2402MHz)  
Test Specification: FCC15.247(a)(2), 99% Bandwidth  
Comment: 3.7VDC

**Test Result**

☒ Passed  
☐ Not Passed



Date: 22.MAY.2015 13:04:06

**99% bandwidth**

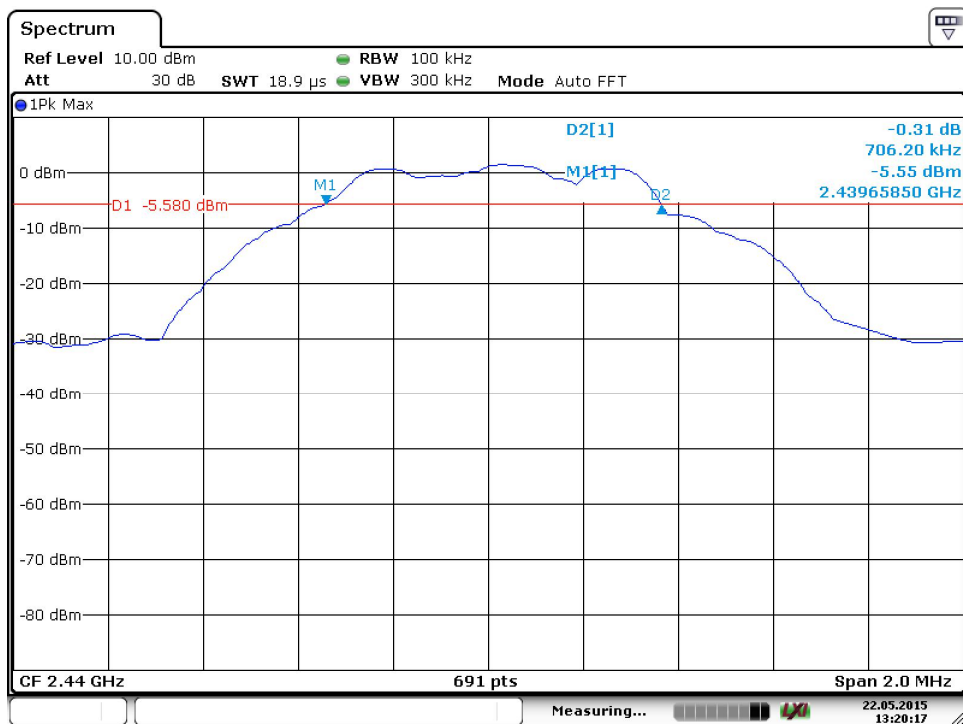
1030.390 kHz

## 6dB & 99% Bandwidth

EUT: GIANT NEOS SYNC  
 Op Condition: Operated, TX Mode (2440MHz)  
 Test Specification: FCC15.247(a)(2), 6dB Bandwidth  
 Comment: 3.7VDC

### Test Result

☒ Passed  
☐ Not Passed



Date: 22.MAY.2015 13:20:16

| 6dB bandwidth | Limit     |
|---------------|-----------|
| 706.200 kHz   | > 500 kHz |

**6dB & 99% Bandwidth**

EUT: GIANT NEOS SYNC  
Op Condition: Operated, TX Mode (2440MHz)  
Test Specification: FCC15.247(a)(2), 99% Bandwidth  
Comment: 3.7VDC

**Test Result**

☒ Passed  
☐ Not Passed



Date: 22.MAY.2015 13:13:18

**99% bandwidth**

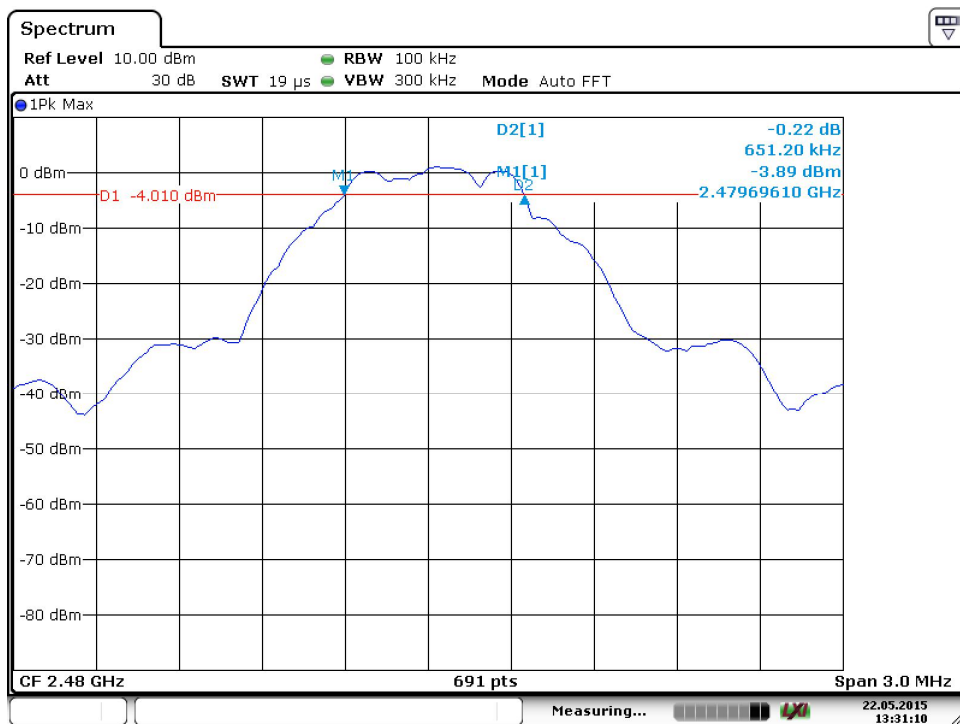
995.658 kHz

## 6dB & 99% Bandwidth

EUT: GIANT NEOS SYNC  
 Op Condition: Operated, TX Mode (2480MHz)  
 Test Specification: FCC15.247(a)(2), 6dB Bandwidth  
 Comment: 3.7VDC

### Test Result

☒ Passed  
☐ Not Passed



Date: 22.MAY.2015 13:31:10

| 6dB bandwidth | Limit     |
|---------------|-----------|
| 651.200 kHz   | > 500 kHz |

**6dB & 99% Bandwidth**

EUT: GIANT NEOS SYNC  
Op Condition: Operated, TX Mode (2480MHz)  
Test Specification: FCC15.247(a)(2), 99% Bandwidth  
Comment: 3.7VDC

**Test Result**

☒ Passed  
☐ Not Passed



Date: 22.MAY.2015 13:25:49

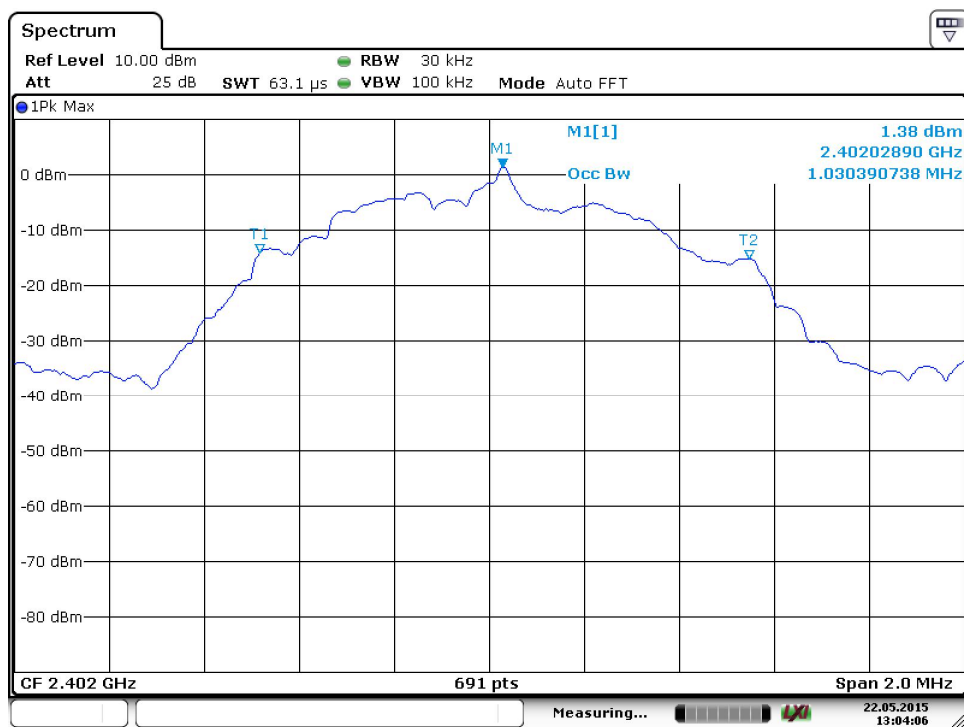
**99% bandwidth**

1039.073 kHz

## 7.3 Peak Output Power

EUT: GIANT NEOS SYNC  
Op Condition: Operated, TX Mode (2402MHz)  
Test Specification: FCC15.247(b)  
Comment: 3.7VDC

Test Result

☒ Passed☐ Not Passed

Date: 22.MAY.2015 13:04:06

| Conducted Output Power | Limit   |
|------------------------|---------|
| 1.38 dBm               | < 30dBm |

**Peak Output Power**

EUT: GIANT NEOS SYNC  
Op Condition: Operated, TX Mode (2440MHz)  
Test Specification: FCC15.247(b)  
Comment: 3.7VDC

**Test Result**

☒ Passed  
☐ Not Passed



Date: 22.MAY.2015 13:13:18

| Conducted Output Power | Limit   |
|------------------------|---------|
| 0.94 dBm               | < 30dBm |

**Peak Output Power**

EUT: GIANT NEOS SYNC  
Op Condition: Operated, TX Mode (2480MHz)  
Test Specification: FCC15.247(b)  
Comment: 3.7VDC

**Test Result**

☒ Passed  
☐ Not Passed



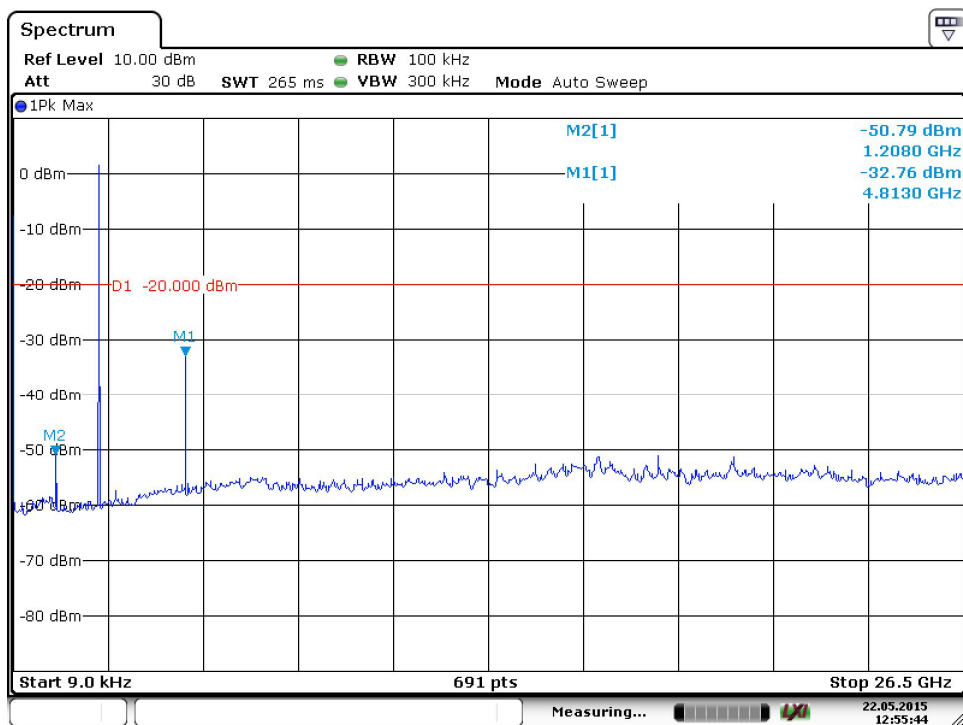
Date: 22.MAY.2015 13:25:49

| Conducted Output Power | Limit   |
|------------------------|---------|
| 0.99 dBm               | < 30dBm |

## 7.4 Spurious Emissions at Antenna Terminals

EUT: GIANT NEOS SYNC  
Op Condition: Operated, TX Mode (2402MHz)  
Test Specification: FCC2.1051 & 15.247(d)  
Comment: 3.7VDC  
Remark: 9kHz to 26.5GHz

Test Result

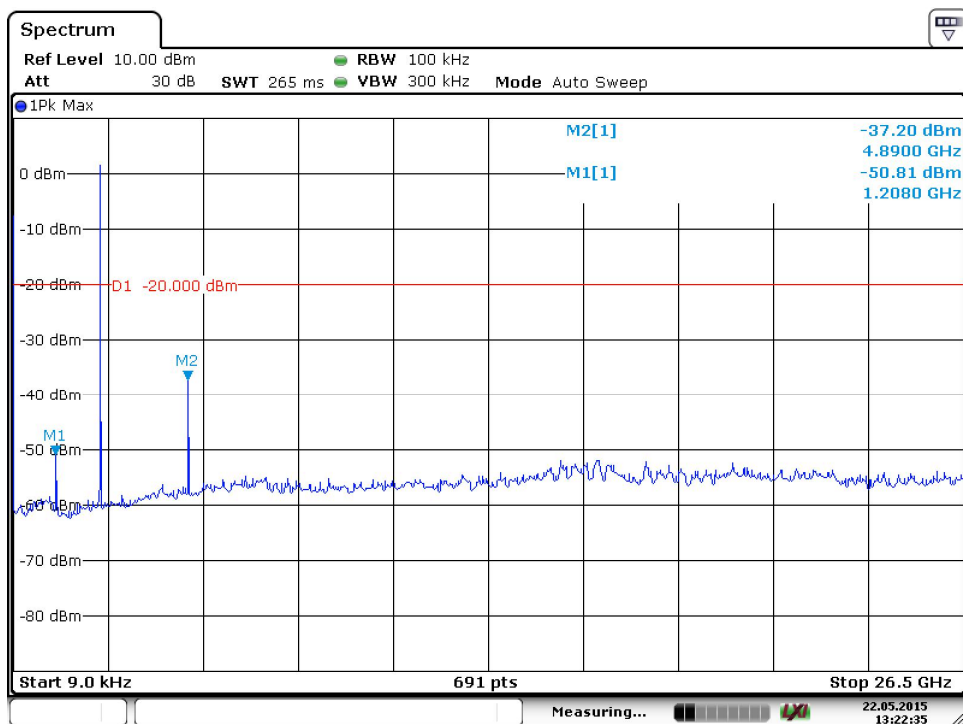
☒ Passed☐ Not Passed

Date: 22 MAY. 2015 12:55:44

**Spurious Emissions at Antenna Terminals**

EUT: GIANT NEOS SYNC  
Op Condition: Operated, TX Mode (2440MHz)  
Test Specification: FCC2.1051 & 15.247(d)  
Comment: 3.7VDC  
Remark: 9kHz to 26.5GHz

Test Result

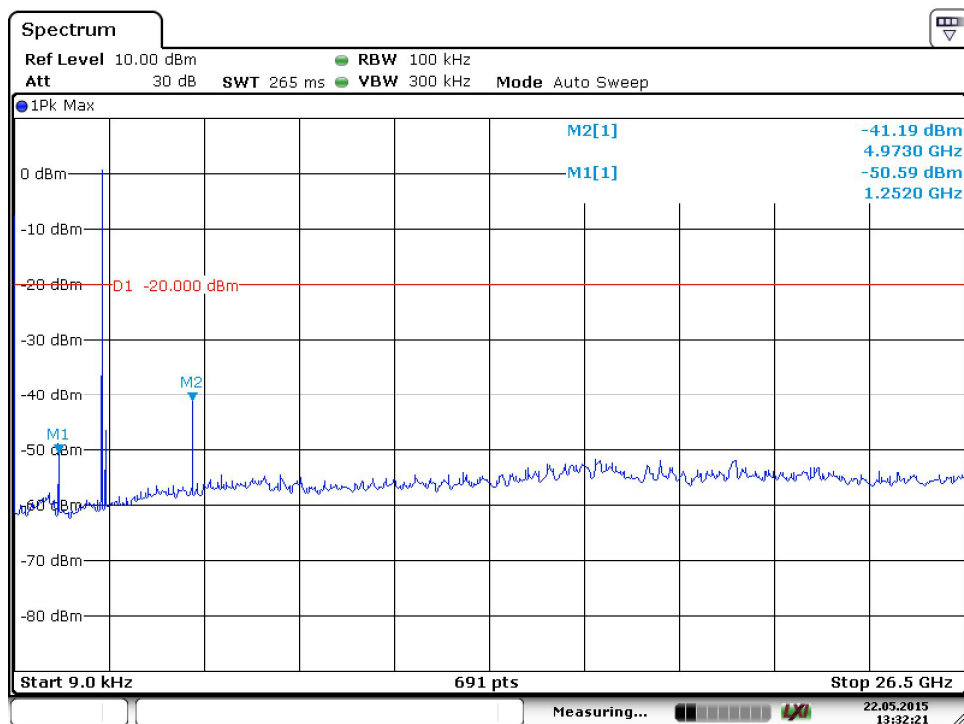
☒ Passed☐ Not Passed

Date: 22.MAY.2015 13:22:36

**Spurious Emissions at Antenna Terminals**

EUT: GIANT NEOS SYNC  
Op Condition: Operated, TX Mode (2480MHz)  
Test Specification: FCC2.1051 & 15.247(d)  
Comment: 3.7VDC  
Remark: 9kHz to 26.5GHz

Test Result

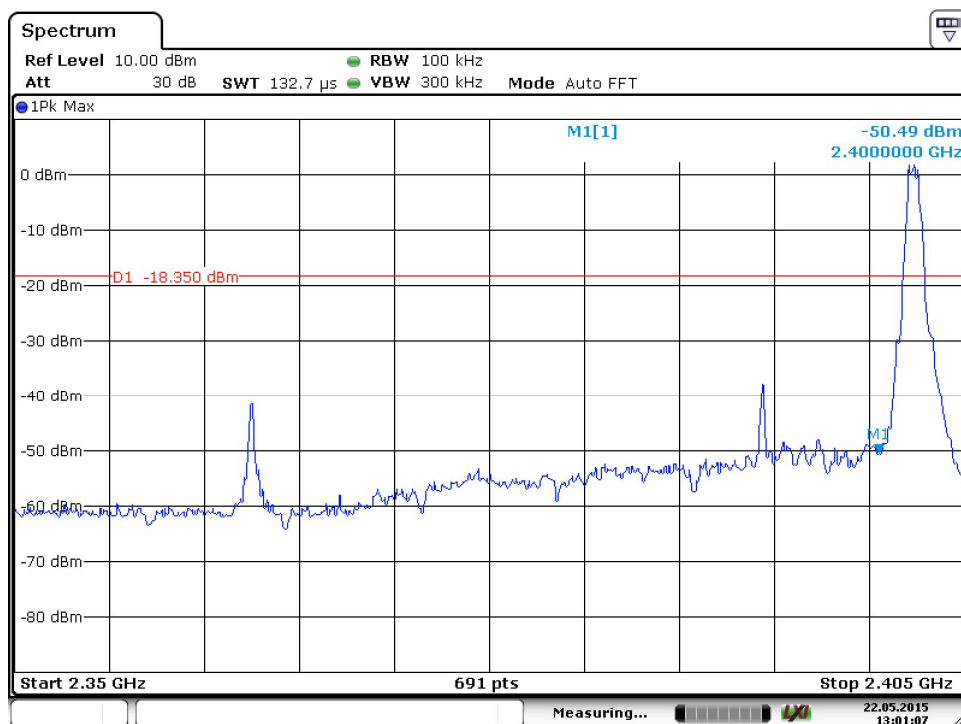
☒ Passed☐ Not Passed

Date: 22.MAY.2015 13:32:21

## 7.5 100kHz Bandwidth of band edges

EUT: GIANT NEOS SYNC  
 Op Condition: Operated, TX Mode (2402MHz)  
 Test Specification: FCC15.247(d), Conducted  
 Comment: 3.7VDC

Test Result

☒ Passed☐ Not Passed

Date: 22.MAY.2015 13:01:07

| Frequency | Result     |
|-----------|------------|
| 2.402 GHz | 1.65 dBm   |
| 2.390 GHz | -50.49 dBm |

| Band edges | Limit  |
|------------|--------|
| 52.14 dB   | > 20dB |

**100kHz Bandwidth of band edges**

EUT: GIANT NEOS SYNC  
Op Condition: Operated, TX Mode (2402MHz)  
Test Specification: FCC15.247(d), Radiated  
Comment: 3.7VDC

**Test Result**☒ Passed☐ Not Passed

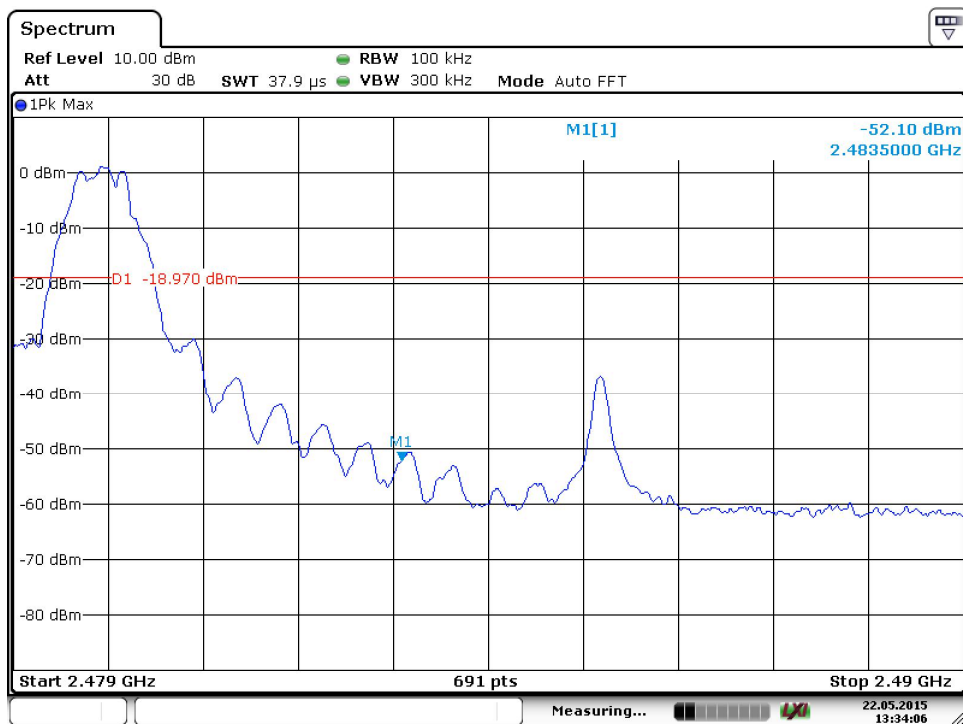
| Frequency<br>MHz | Result<br>dB $\mu$ V/m | Limit<br>dB $\mu$ V/m | Margin<br>dB | Detector |
|------------------|------------------------|-----------------------|--------------|----------|
| 2439.000         | 35.78                  | 74                    | -38.32       | Peak     |
| 2439.000         | 31.06                  | 54                    | -22.94       | Average  |

### 100kHz Bandwidth of band edges

EUT: GIANT NEOS SYNC  
 Op Condition: Operated, TX Mode (2480MHz)  
 Test Specification: FCC15.247(d), Conducted  
 Comment: 3.7VDC

#### Test Result

☒ Passed  
☐ Not Passed



Date: 22.MAY.2015 13:34:06

| Frequency  | Result     |
|------------|------------|
| 2.480 GHz  | 1.03 dBm   |
| 2.4835 GHz | -52.10 dBm |

| Band edges | Limit  |
|------------|--------|
| 53.13 dB   | > 20dB |

**100kHz Bandwidth of band edges**

EUT: GIANT NEOS SYNC  
Op Condition: Operated, TX Mode (2480MHz)  
Test Specification: FCC15.247(d), Radiated  
Comment: 3.7VDC

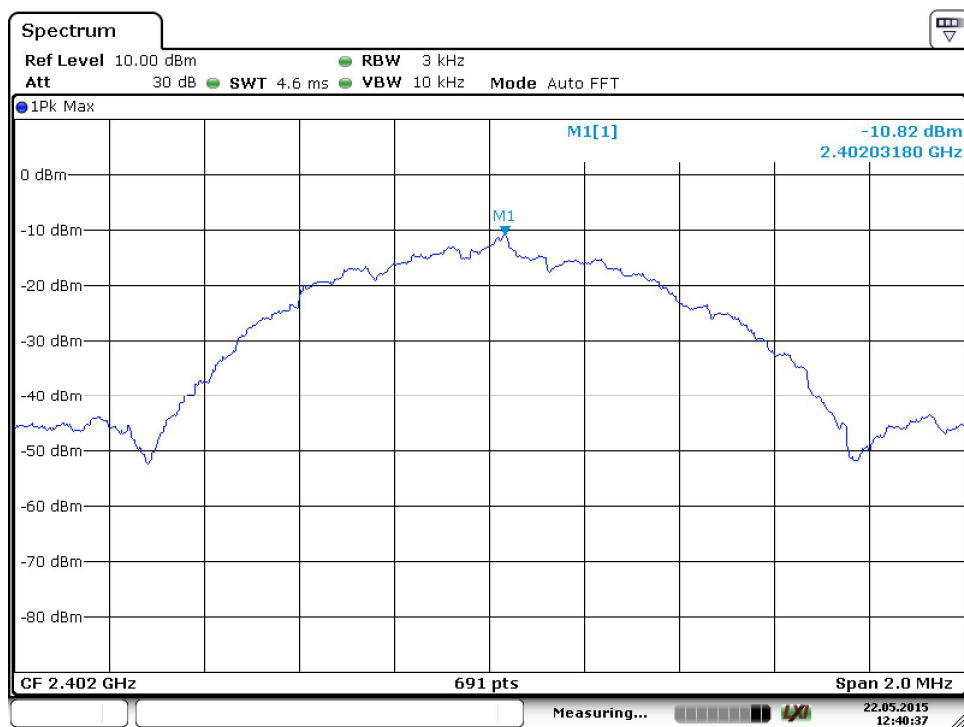
|                                            |
|--------------------------------------------|
| Test Result                                |
| <input checked="" type="checkbox"/> Passed |
| <input type="checkbox"/> Not Passed        |

| Frequency<br>MHz | Result<br>dB $\mu$ V/m | Limit<br>dB $\mu$ V/m | Margin<br>dB | Detector |
|------------------|------------------------|-----------------------|--------------|----------|
| 2483.500         | 36.85                  | 74                    | -37.15       | Peak     |
| 2483.500         | 32.14                  | 54                    | -21.86       | Average  |

## 7.6 Power Spectral Density

EUT: GIANT NEOS SYNC  
 Op Condition: Operated, TX Mode (2402MHz)  
 Test Specification: FCC15.247(e)  
 Comment: 3.7VDC

Test Result

☒ Passed☐ Not Passed

Date: 22.MAY.2015 12:40:37

| Frequency | PSD               | Result          |
|-----------|-------------------|-----------------|
| 2.402GHz  | -10.82 dBm / 3kHz | < 8 dBm / 3 kHz |

**Power Spectral Density**

EUT: GIANT NEOS SYNC  
Op Condition: Operated, TX Mode (2440MHz)  
Test Specification: FCC15.247(e)  
Comment: 3.7VDC

**Test Result**

☒ Passed  
☐ Not Passed



Date: 22.MAY.2015 13:17:50

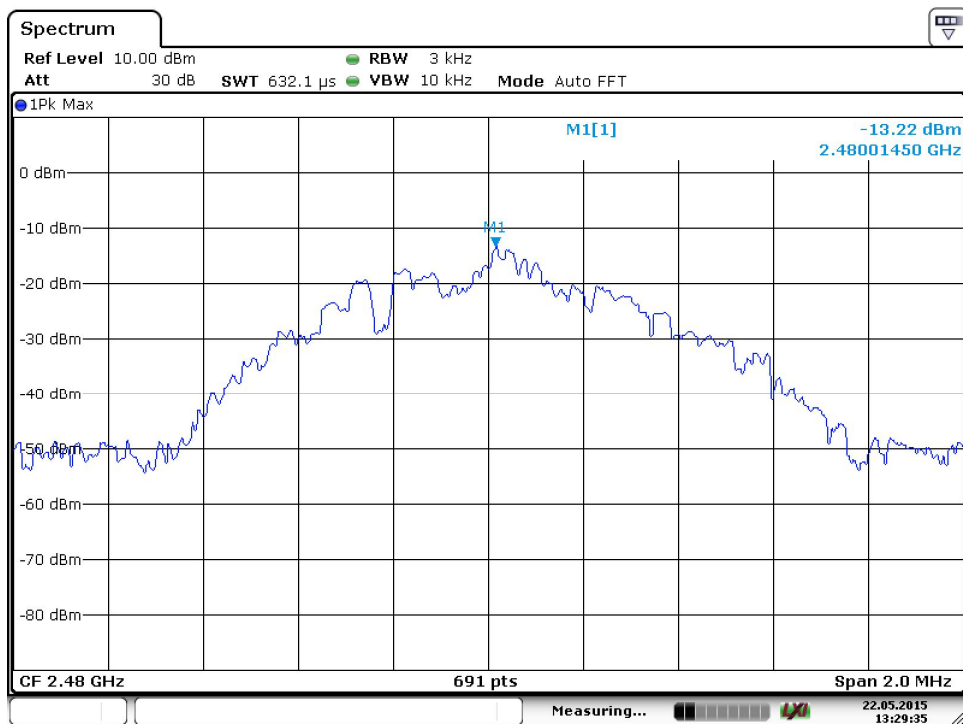
| Frequency | PSD               | Result          |
|-----------|-------------------|-----------------|
| 2.440GHz  | -11.45 dBm / 3kHz | < 8 dBm / 3 kHz |

**Power Spectral Density**

EUT: GIANT NEOS SYNC  
Op Condition: Operated, TX Mode (2480MHz)  
Test Specification: FCC15.247(e)  
Comment: 3.7VDC

**Test Result**

☒ Passed  
☐ Not Passed



Date: 22.MAY.2015 13:29:36

| Frequency | PSD               | Result          |
|-----------|-------------------|-----------------|
| 2.480GHz  | -13.22 dBm / 3kHz | < 8 dBm / 3 kHz |

## 7.7 Antenna Requirement

EUT: GIANT NEOS SYNC  
Op Condition: Operated, TX Mode  
Test Specification: FCC15.203 & 15.247(b)  
Comment: 3.7VDC

**Test Result**☒ Passed☐ Not Passed

### Limit

For intentional device, according to FCC Title 47 Part 15.203, an intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. And according to FCC Title 47 Part 15.247(b), if transmitting antennas of directional gain greater than 6 dBi are used, the power shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

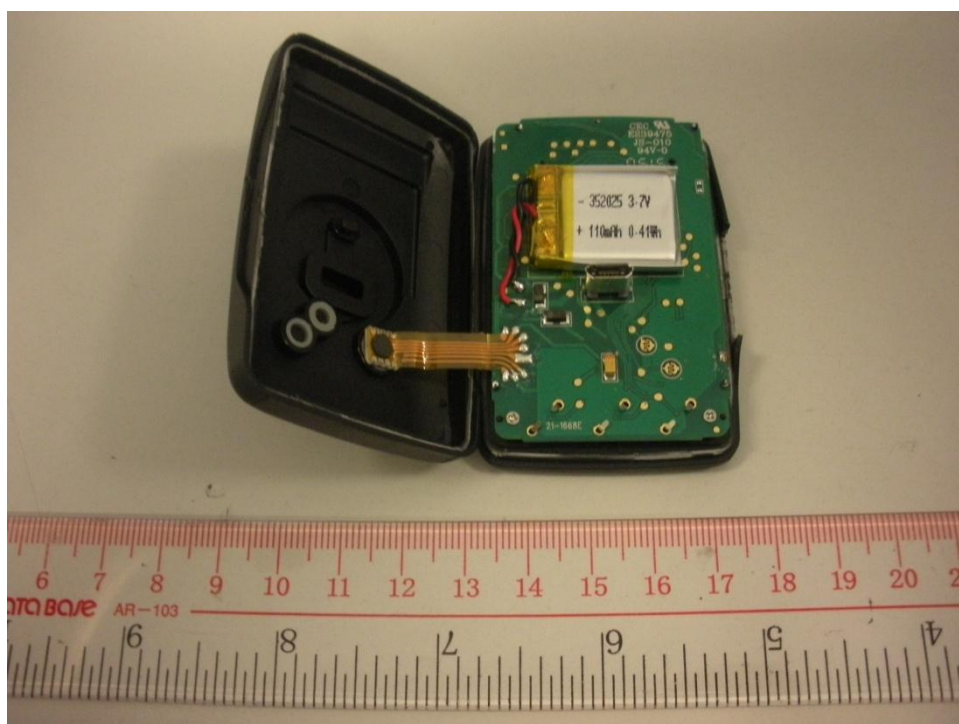
### Antenna Connector Construction

The antenna used in this product is PCB antenna, and the maximum gain of this antenna is 0.0 dBi.

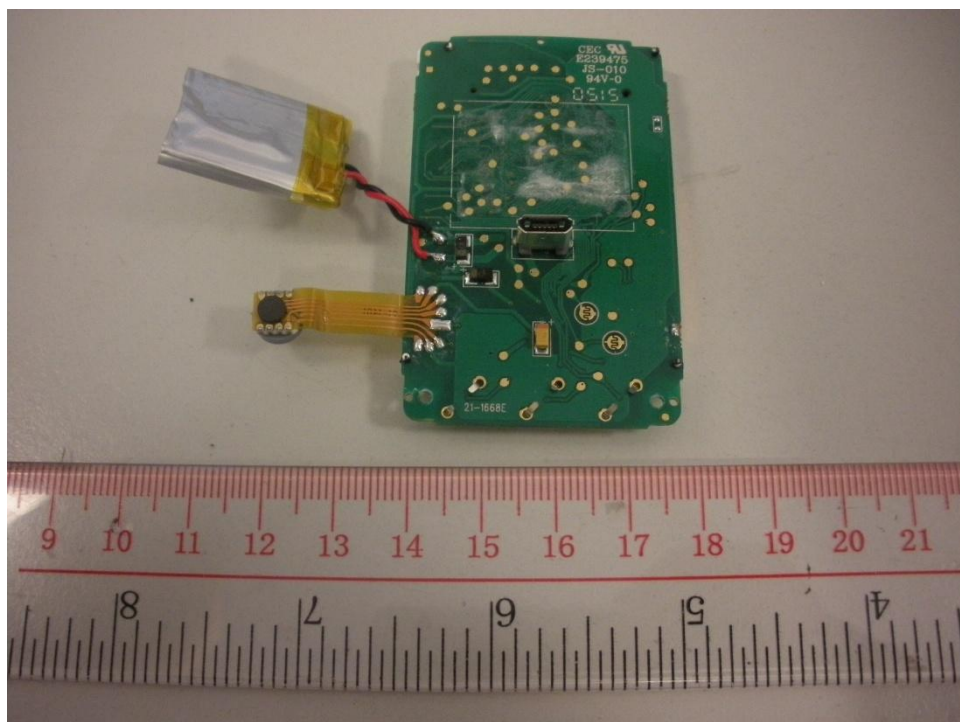
## 8 Appendix A - Photographs of EUT



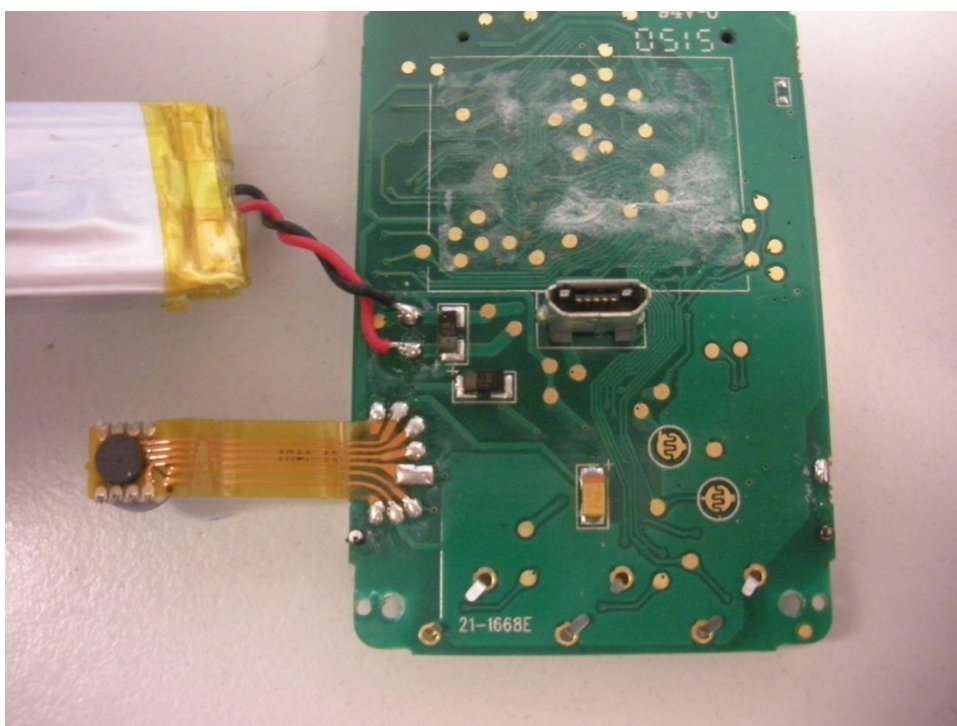
## Appendix A



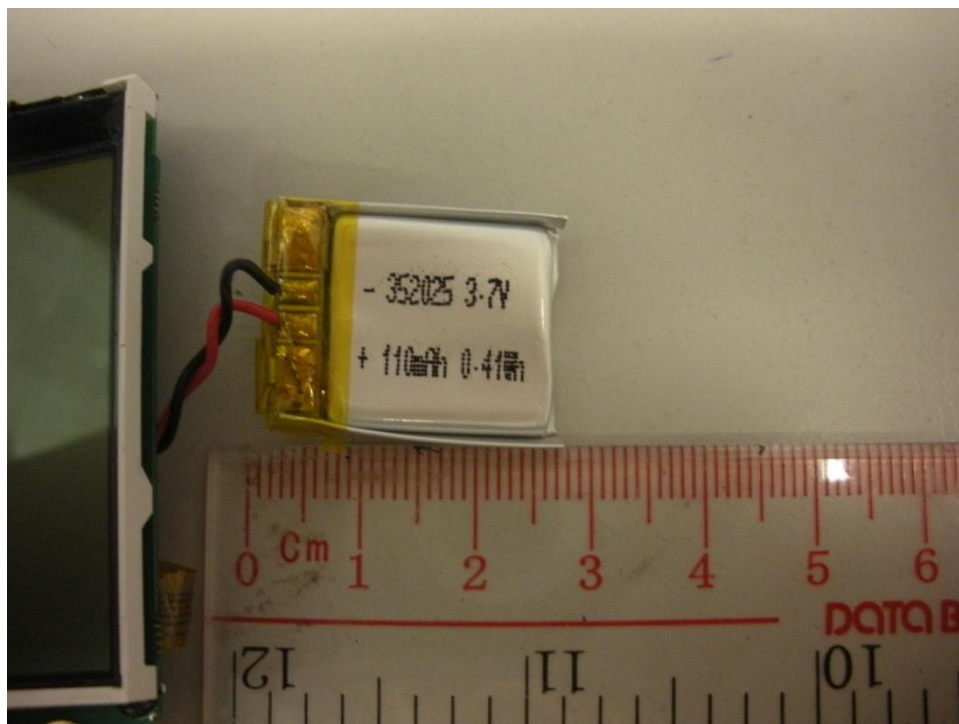
## Appendix A



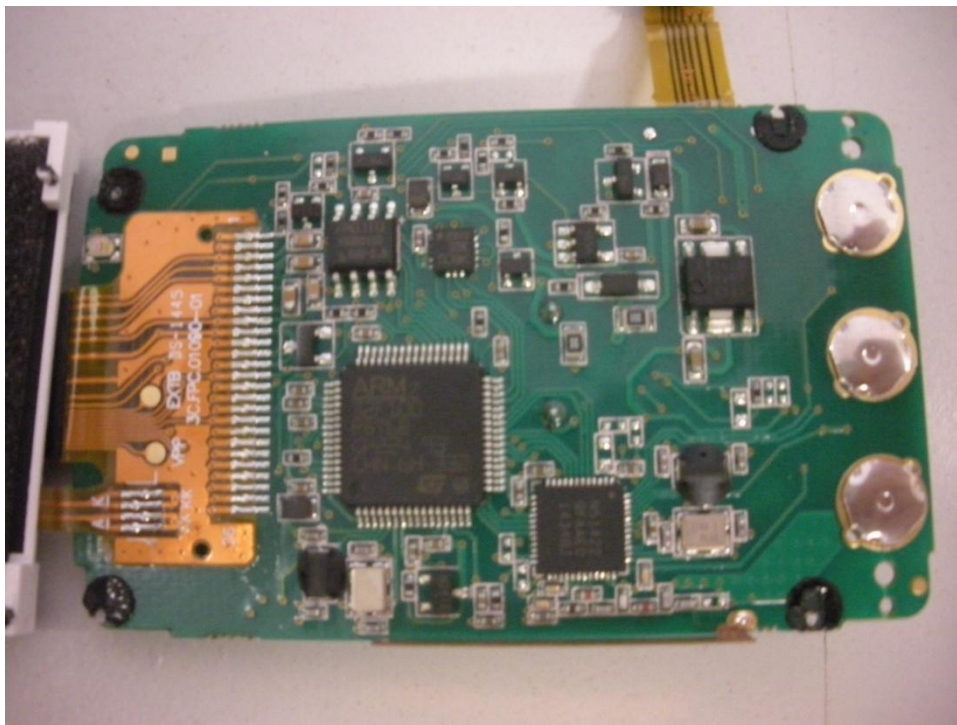
## Appendix A



## Appendix A

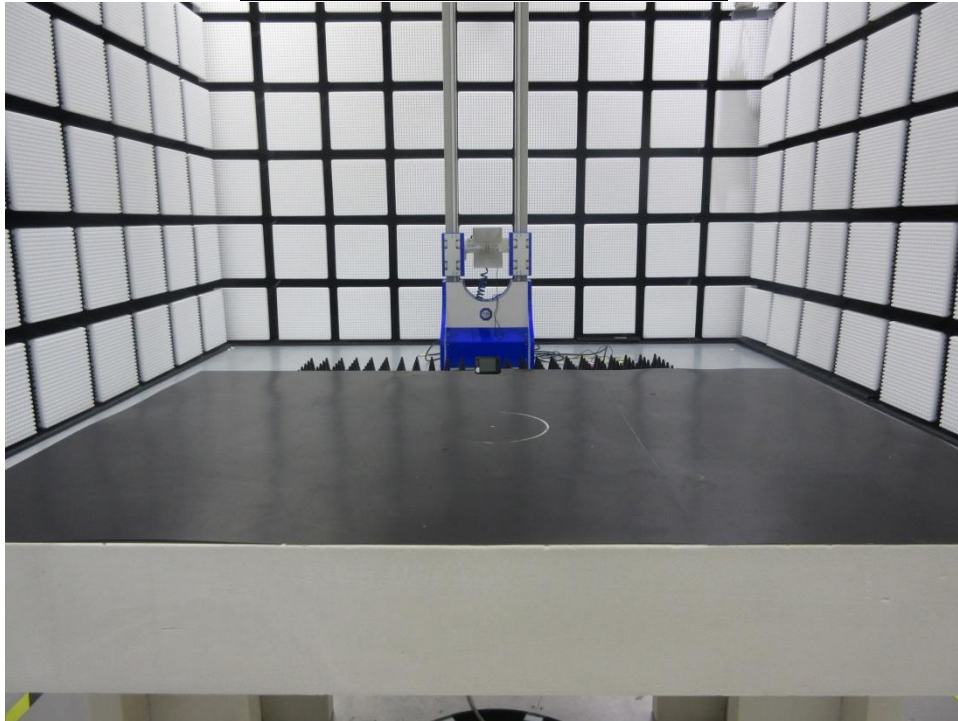


## Appendix A

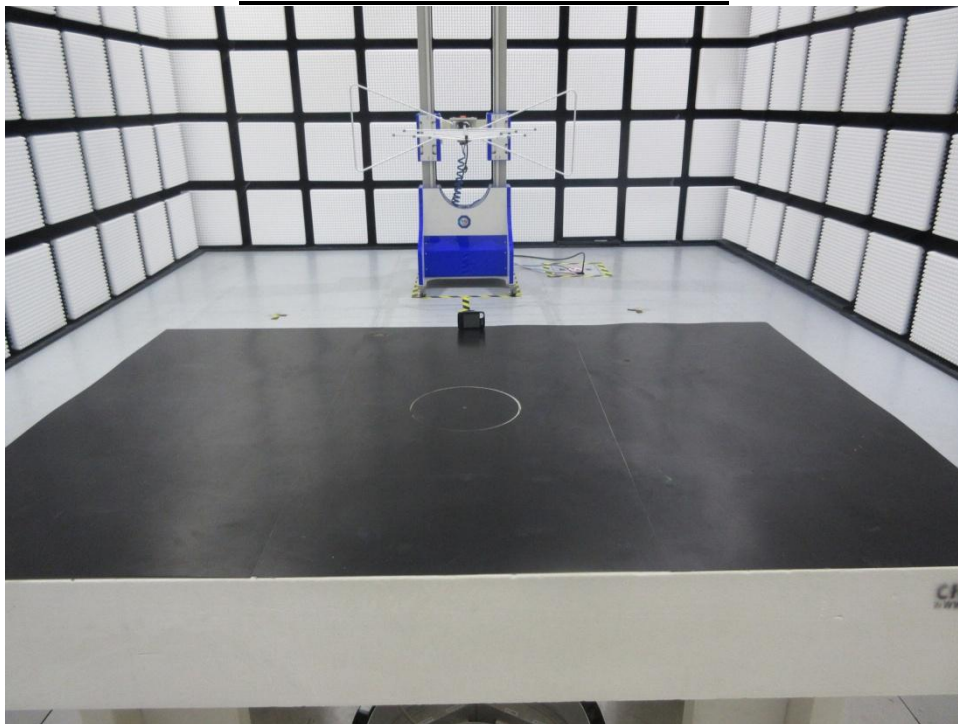


## 9 Appendix B - Setup Photographs of EUT

### Radiated Emission 1GHz-25GHz

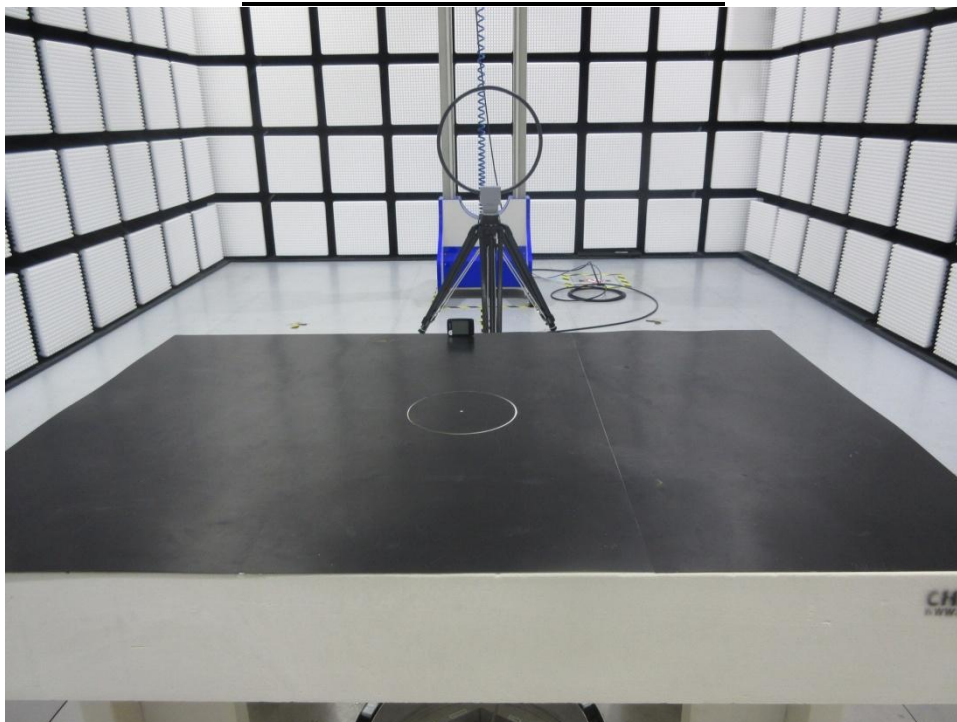


### Radiated Emission 30MHz-1GHz

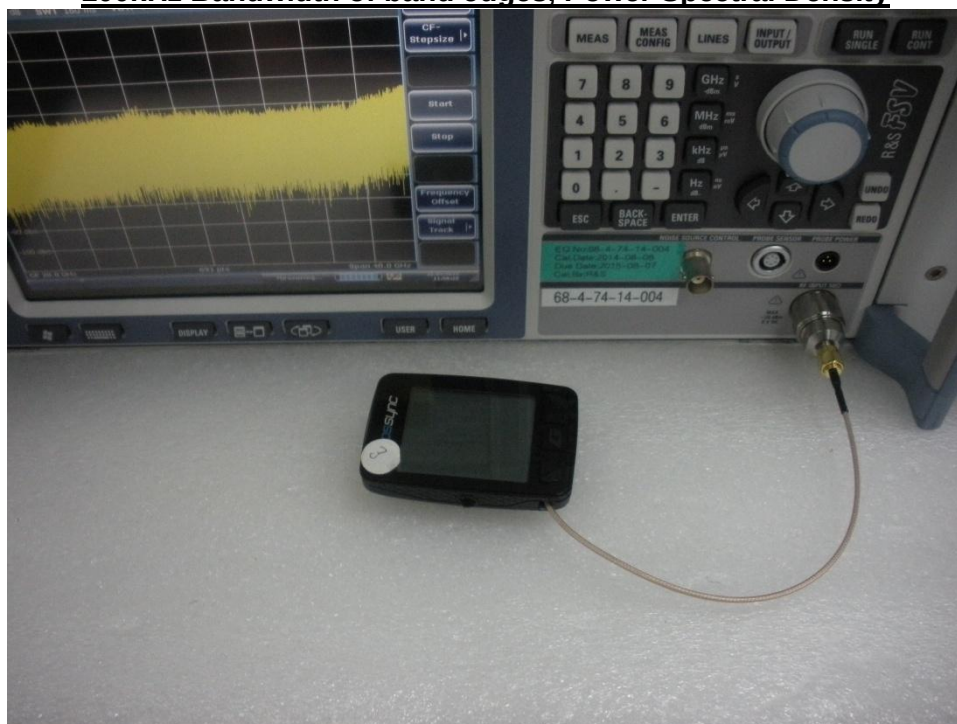


## Appendix B

### Radiated Emission 9kHz-30MHz



6dB & 99% Bandwidth, Peak Output Power,  
Spurious Emissions at Antenna Terminals,  
100kHz Bandwidth of band edges, Power Spectral Density



## 10 Appendix C - General Product Information

### Radiofrequency radiation exposure evaluation

According to KDB 447498 D01v05r02 section 4.3.1,

>> The 1-g SAR test exclusion thresholds, for 100MHz to 6GHz, at test separation distances  $\leq 50$  mm are determined by:

Power at 2.402GHz = 1.3740 mW EIRP

Power at 2.440GHz = 1.2416 mW EIRP

Power at 2.480GHz = 1.2560 mW EIRP

$[(1.3740 \text{ mW}) / (20 \text{ mm})] \cdot [\text{sqrt}(2.402 \text{ GHz})] = 0.1064$  which is  $\leq 3.0$  for 1-g SAR.

$[(1.2416 \text{ mW}) / (20 \text{ mm})] \cdot [\text{sqrt}(2.440 \text{ GHz})] = 0.0969$  which is  $\leq 3.0$  for 1-g SAR.

$[(1.2560 \text{ mW}) / (20 \text{ mm})] \cdot [\text{sqrt}(2.480 \text{ GHz})] = 0.0988$  which is  $\leq 3.0$  for 1-g SAR.

Therefore the device is exempt from stand-alone SAR test requirements.

>> The fundamental frequency of the EUT is 2402MHz-2480MHz, the test separation distance is  $< 50$ mm. (Manufacturer Specification distance is 20mm)

>> The power of EUT measured is:

- For 2402MHz:  $1.3740\text{mW} = 10 \log(1.3740) \text{ dBm} \sim +1.38\text{dBm}$
- For 2440MHz:  $1.2416\text{mW} = 10 \log(1.2416) \text{ dBm} \sim +0.94\text{dBm}$
- For 2480MHz:  $1.2560\text{mW} = 10 \log(1.2560) \text{ dBm} \sim +0.99\text{dBm}$