

## ELECTROMAGNETIC EMISSIONS COMPLIANCE REPORT

### UN-INTENTIONAL RADIATOR CERTIFICATION TO FCC PART 15 SUBPART B REQUIREMENT

OF

**Product Name:** GPS Compass – GuideMate  
**Brand Name:** NolaN, PMR  
**Model Name:** NGPSCPXXX (X= 0~9 or A~Z)  
**FCC ID:** TNZNGPSCPXXX  
**Model Difference:** Different model name depend on different traders.  
**Report No:** ER/2008/70040  
**Issue Date:** Aug. 06, 2008  
**FCC Rule Part:** Part 15 B  
**Prepared for:** Nolan Systems Inc.  
**1595 Cleo Springs Dr., San Jose, CA 95131, USA**  
**Prepared by:** SGS Taiwan Ltd.  
**Electronics & Communication Laboratory**  
**No. 134, Wu Kung Rd., Wuku Industrial Zone,**  
**Taipei County, Taiwan.**



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**VERIFICATION OF COMPLIANCE**

**Applicant:** Nolan Systems Inc.  
1595 Cleo Springs Dr., San Jose, CA 95131, USA

**Product Name:** GPS Compass – GuideMate

**Brand / Marketing Name:** NolaN, PMR

**FCC ID Number:** TNZNGPSCPXXX

**Model Name:** NGPSCPXXX (X= 0~9 or A~Z)

**Model Difference:** Different model name depend on different traders.

**File Number:** ER/2008/70040

**Date of test:** Jul. 25, 2008 ~Aug. 05, 2008

**Date of EUT Receive:** Jul. 24, 2008

**We hereby certify that:**

The above equipment was tested by SGS Taiwan Ltd Electronics & Communication Laboratory. The test data, data evaluation, test procedures, and equipment configurations shown in this report were made in accordance with the procedures given in ANSI C63.4 (2003) and the energy emitted by the sample EUT tested as described in this report is in compliance with conducted and radiated emission limits of FCC Rules Part 15B.

The test results of this report relate only to the tested sample identified in this report.

**Test By:****Date**

Aug. 06, 2008

*Sky Wang / Asst. Supervisor***Prepared By:****Date**

Aug. 06, 2008

*Gigi Yeh / Clerk***Approved By****Date**

Aug. 06, 2008

*Vincent Su / Manager*

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## Version

| Version No. | Date          | Description                  |
|-------------|---------------|------------------------------|
| 00          | Aug. 06, 2008 | Initial creation of document |
|             |               |                              |
|             |               |                              |
|             |               |                              |

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## 1. GENERAL INFORMATION

### 1.1 Product Description

General:

|                   |  |
|-------------------|--|
| Product Name:     | GPS Compass – GuideMate                            |
| Brand Name:       | NolaN, PMR   |
| Model Name:       | NGPSCPXXX (X= 0~9 or A~Z)                          |
| Model Difference: | Different model name depend on different traders.  |
| Data Cable (USB): | One provided to a PC for data transfer, Model: N/A |
| Power Supply      | DC 3V form AAA batteries *2                        |
| Hardware Version: | V1.0   |
| Software Version: | V5.06  |

GPS:

|                                 |                     |
|---------------------------------|---------------------|
| Receiver Frequency              | L1 Band, 1575.42MHz |
| Frequency Conversion oscillator | 12MHz and 32.768kHz |
| Antenna Designation             | mono pole           |

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## 1.2 Related Submittal(s) / Grant (s)

This submittal(s) (test report) is intended for FCC ID: TNZNGPSCPXXX filing to comply with Section Part 15B of the FCC CFR 47 Rules.

## 1.3 Test Methodology

Both conducted and radiated testing were performed according to the procedures in ANSI C63.4 (2003). Radiated testing was performed at an antenna to EUT distance 3 meters.

## 1.4 Test Facility

The measurement facilities used to collect the 3m Radiated Emission and AC power line conducted data are located on the address of SGS Taiwan Ltd. Electronics & Communication Laboratory No. 134, Wu Kung Rd., Wuku Industrial Zone, Taipei Country, Taiwan which are constructed and calibrated to meet the FCC requirements in documents ANSI C63.4: 2003. FCC Registration Number are: 990257 and 236194, Canada Registration Number: 4620A-1

The 10 m Open Area Test Sites located on the address of SGS Taiwan Ltd. Electronics & Communication Laboratory No. 29, Pau-Tou-Tsuo Valley Chia-Pau Tsuen, Linkou Hsiang, Taipei county, which is constructed and calibrated to meet the CISPR 22/EN 55022 requirements. SGS Site No. 1(3 &10 meters) and FCC Registration Number: 94644.

All equipment is calibrated externally and traceable to SI (International System of Unit).

## 1.5 Special Accessories

Not available for this EUT intended for grant.

## 1.6 Equipment Modifications

Not available for this EUT intended for grant.

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## 2. System Test Configuration

### 2.1 EUT Configuration

The EUT configuration for testing is installed on RF field strength measurement to meet the Commissions requirement and operating in a manner which intends to maximize its emission characteristics in a continuous normal application.

### 2.2 EUT Exercise

The EUT was operated in the normal operating data transfer with PC through USB interface mode.

### 2.3 Test Procedure

#### 2.3.1 Conducted Emissions

The EUT is a placed on as turn table which is 0.8 m above ground plane. According to the requirements in Section 7 of ANSI C63.4-2003. Conducted emissions from the EUT measured in the frequency range between 0.15 MHz and 30MHz using CISPR Quasi-Peak and average detector mode.

#### 2.3.2 Radiated Emissions

The EUT is a placed on as turn table which is 0.8 m above ground plane. The turn table shall rotate 360 degrees to determine the position of maximum emission level. EUT is set 3m away from the receiving antenna which varied from 1m to 4m to find out the highest emission. And also, each emission was to be maximized by changing the polarization of receiving antenna both horizontal and vertical. In order to find out the max. emission, the relative positions of this hand-held transmitter(EUT) was rotated through three orthogonal axes and measurement procedures for electric field radiated emissions above 1 GHz the EUT measurement is to be made “while keeping the antenna in the ‘cone of radiation’ from that area and pointed at the area both in azimuth and elevation, with polarization oriented for maximum response.” is still within the 3dB illumination BW of the measurement antenna. according to the requirements in Section 8 and Sub-clause 8.3.1.2 of ANSI C63.4-2003.

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## 2.4 Limitation

### (1) Conducted Emission

According to section 15.107(a) Conducted Emission Limits is as following.

| Frequency range<br>MHz | Class B Limits |          |
|------------------------|----------------|----------|
|                        | Quasi-peak     | Average  |
| 0.15 to 0.50           | 66 to 56       | 56 to 46 |
| 0.50 to 5              | 56             | 46       |
| 5 to 30                | 60             | 50       |

**Note**

- 1.The lower limit shall apply at the transition frequencies
- 2.The limit decreases linearly with the logarithm of the frequency in the range 0.15 MHz to 0.50 MHz.

### (2) Radiated Emission

According to section 15.109(a) Radiated Emission Class B Limits is as following:

| Frequency<br>(MHz) | Field strength<br>μV/m | Distance (m) | Field strength at 3m<br>dB $\mu$ V/m |
|--------------------|------------------------|--------------|--------------------------------------|
| 30-88              | 100                    | 3            | 40                                   |
| 88-216             | 150                    | 3            | 43.5                                 |
| 216-960            | 200                    | 3            | 46                                   |
| Above 960          | 500                    | 3            | 54                                   |

Remark: 1. Emission level in dB $\mu$ V/m=20 log (uV/m)

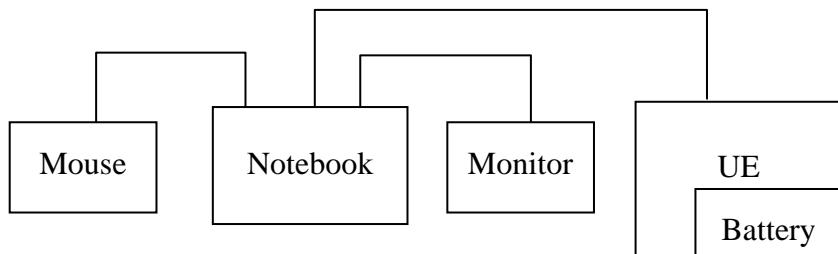
2. Measurement was performed at an antenna to the closed point of EUT distance of 3 meters.

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## 2.5 Configuration of Tested System

**Fig. 1 Configuration of Tested System**

Radiated Emission



**Table 1 Support Equipment Used in Tested System**

| Item | Equipment   | Mfr/Brand | Model/Type No. | Series No.                   | Data Cable | <b>Power Cord</b> |
|------|-------------|-----------|----------------|------------------------------|------------|-------------------|
| 1.   | Notebook PC | IBM       | T60            | L3DK794                      | Shielded   | Un-shielded       |
| 2.   | Monitor     | DELL      | E153FPC        | N/A                          | Shielded,  | Un-shielded       |
| 3.   | USB Mouse   | BENQ      | M106-C2W       | 99Q3188C2W48C<br>04422SA0000 | Shielded,  | N/A               |

**Note:** All the above equipment/cables were placed in worse case positions to maximize emission signals during emission test.

**Grounding:** Grounding was in accordance with the manufacturer's requirements and conditions for the intended use.

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## Summary of Test Results

| FCC Rules | Description Of Test        | Result    |
|-----------|----------------------------|-----------|
| §15.107   | Conducted Emission Class B | Compliant |
| §15.109   | Radiated Emission Class B  | Compliant |

### 3. Description of test modes

Test program used to control the EUT for staying in continuous data transfer with PC mode was programmed

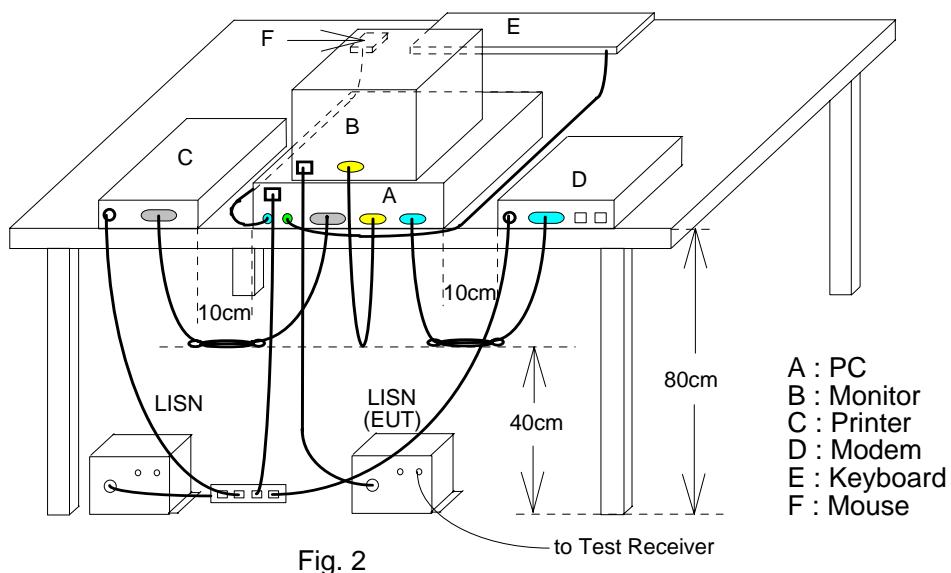
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## 4. Conducted Emissions Test

### 5.1 Measurement Procedure:

1. The EUT was placed on a table which is 0.8m above ground plane.
2. Maximum procedure was performed on the six highest emissions to ensure EUT compliance.
3. Repeat above procedures until all frequency measured were complete.

### 5.2 Test SET-UP (Block Diagram of Configuration)



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### 5.3 Measurement Equipment Used:

| Conducted Emission Test Site |            |                         |               |            |            |
|------------------------------|------------|-------------------------|---------------|------------|------------|
| EQUIPMENT TYPE               | MFR        | MODEL NUMBER            | SERIAL NUMBER | LAST CAL.  | CAL DUE.   |
| EMC Analyzer                 | HP         | 8594EM                  | 3624A00203    | 09/02/2007 | 09/03/2008 |
| EMI Test Receiver            | R&S        | ESCS30                  | 828985/004    | 06/09/2008 | 06/10/2009 |
| Transient Limiter            | HP         | 11947A                  | 3107A02062    | 09/02/2007 | 09/03/2008 |
| LISN                         | Rolf-Heine | NNB-2/16Z               | 99012         | 12/31/2007 | 12/30/2008 |
| LISN                         | Rolf-Heine | NNB-2/16Z               | 99013         | 01/10/2008 | 01/09/2009 |
| Coaxial Cables               | FCC        | FCC-LISN-50/250-25-2-01 | 04034         | 01/11/2008 | 01/10/2009 |

### 5.4 Measurement Result :

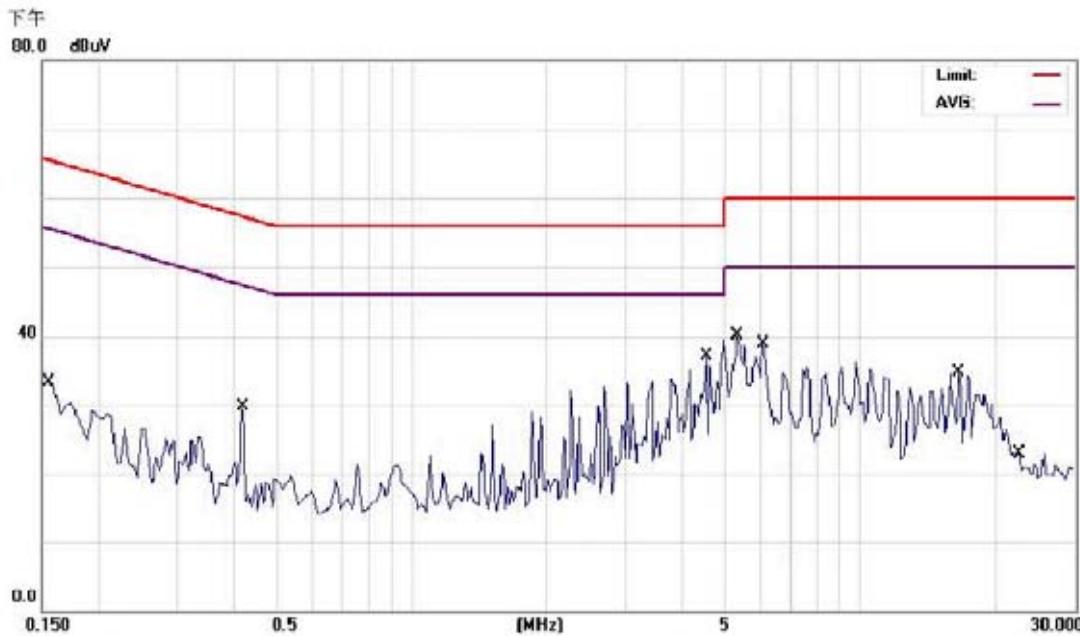
The initial step in collecting conducted data is a spectrum analyzer peak scan of the measurement range. Significant peaks are then marked as shown on the following data page, and these signals are then quasi-peaked.

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## AC POWER LINE CONDUCTED EMISSION TEST DATA

|                 |                   |           |      |            |               |
|-----------------|-------------------|-----------|------|------------|---------------|
| Operation Mode: | GPS+USB Data Link |           |      | Test Date: | Aug. 01, 2008 |
| Temperature:    | 25 °C             | Humidity: | 62 % | Test By:   | Sky           |

## Conducted Emission Measurement



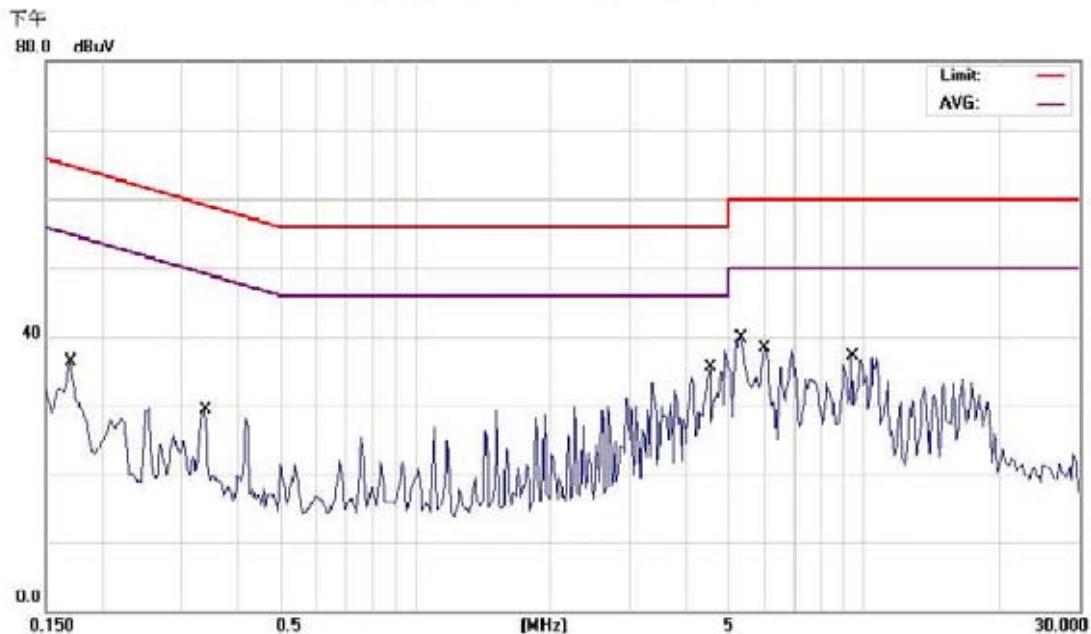
Site SGS CONDUCTED #1  
 Limit: CISPR22 Class B Conduction(QP)  
 EUT: GPS Compass - GuideMate  
 M/N: NGPSCPXXX  
 Note: GPS + USB Data Link

Phase: **L1** Temperature: 25 °C  
 Power: AC 120V/60Hz Humidity: 62 %  
 Distance: Air Pressure: hpa

| No. Mk. | Freq.   | Reading Level | Factor | Measure-<br>ment | Limit | Over   |      |    |          |
|---------|---------|---------------|--------|------------------|-------|--------|------|----|----------|
|         |         |               |        |                  |       | MHz    | dBuV | dB | Detector |
| 1       | 0.1550  | 32.89         | 0.46   | 33.35            | 65.73 | -32.38 | QP   |    |          |
| 2       | 0.4200  | 29.07         | 0.63   | 29.70            | 57.45 | -27.75 | QP   |    |          |
| 3 *     | 4.5600  | 36.02         | 0.99   | 37.01            | 56.00 | -18.99 | QP   |    |          |
| 4       | 5.3200  | 39.13         | 1.02   | 40.15            | 60.00 | -19.85 | QP   |    |          |
| 5       | 6.0800  | 37.88         | 1.04   | 38.92            | 60.00 | -21.08 | QP   |    |          |
| 6       | 16.6400 | 33.52         | 1.20   | 34.72            | 60.00 | -25.28 | QP   |    |          |

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## Conducted Emission Measurement



## Site SGS CONDUCTED #1

Limit: CISPR22 Class B Conduction(QP)

EUT: GPS Compass - GuideMate

MN: NGPSCPXXX

Note: GPS + USB Data Link

Phase: **N**

Power: AC 120V/60Hz

Distance:

Temperature: 25 °C

Humidity: 62 %

Air Pressure: hpa

| No. | Mk. | Freq.  | Reading Level | Factor | Measure-<br>ment | Limit | Over   |          |         |
|-----|-----|--------|---------------|--------|------------------|-------|--------|----------|---------|
|     |     |        |               |        |                  |       | dB     | Detector | Comment |
| 1   |     | 0.1700 | 35.88         | 0.48   | 36.36            | 64.96 | -28.60 | QP       |         |
| 2   |     | 0.3400 | 28.66         | 0.59   | 29.25            | 59.20 | -29.95 | QP       |         |
| 3   |     | 4.5600 | 34.37         | 1.09   | 35.46            | 56.00 | -20.54 | QP       |         |
| 4   | *   | 5.3200 | 38.61         | 1.12   | 39.73            | 60.00 | -20.27 | QP       |         |
| 5   |     | 6.0800 | 36.97         | 1.14   | 38.11            | 60.00 | -21.89 | QP       |         |
| 6   |     | 9.4400 | 35.79         | 1.23   | 37.02            | 60.00 | -22.98 | QP       |         |

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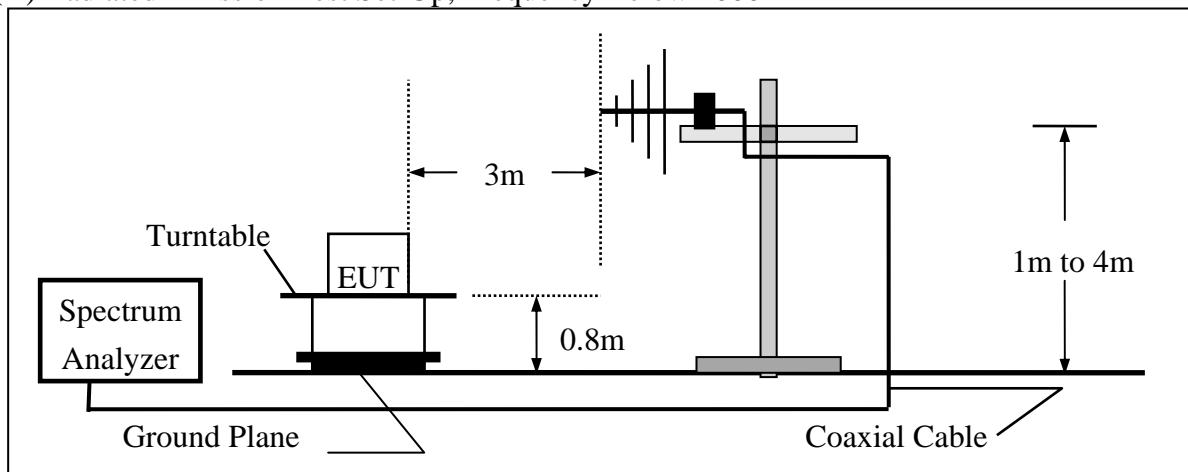
## 5. Radiated Emission Test

### 6.1 Measurement Procedure

1. The EUT was placed on a turn table which is 0.8m above ground plane.
2. Maximum procedure was performed on the six highest emissions to ensure EUT compliance.
3. And also, each emission was to be maximized by changing the polarization of receiving antenna both horizontal and vertical.
4. Repeat above procedures until all frequency measured were complete.

### 6.2 Test SET-UP (Block Diagram of Configuration)

(A) Radiated Emission Test Set-Up, Frequency Below 1000MHz



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### 6.3 Measurement Equipment Used:

| 966 Chamber       |              |                     |               |            |            |
|-------------------|--------------|---------------------|---------------|------------|------------|
| EQUIPMENT TYPE    | MFR          | MODEL NUMBER        | SERIAL NUMBER | LAST CAL.  | CAL DUE.   |
| Spectrum Analyzer | R&S          | FSP 40              | 100034        | 01/05/2008 | 01/04/2009 |
| Spectrum Analyzer | Agilent      | E7405A              | US41160416    | 07/04/2008 | 07/03/2009 |
| Loop Antenna      | Messtec      | FLA30               | 03/10086      | 03/06/2008 | 03/05/2009 |
| Bi-log Antenna    | SCHWAZBECK   | VULB9160            | 3224          | 11/14/2008 | 11/13/2008 |
| Pre-Amplifier     | HP           | 8447D               | 2944A09469    | 07/19/2008 | 07/18/2009 |
| Turn Table        | HD           | DT420               | N/A           | N.C.R      | N.C.R      |
| Antenna Tower     | HD           | MA240-N             | 240/657       | N.C.R      | N.C.R      |
| Controller        | HD           | HD100               | N/A           | N.C.R      | N.C.R      |
| Low Loss Cable    | HUBER+SUHNER | SUCOFLEX 104PEA-10M | 10m           | 10/09/2007 | 10/08/2008 |
| Low Loss Cable    | HUBER+SUHNER | SUCOFLEX 104PEA-3M  | 3m            | 10/09/2007 | 10/08/2008 |
| Site NSA          | SGS          | 966 chamber         | N/A           | 11/17/2007 | 11/16/2008 |

### 6.4 Field Strength Calculation

The field strength is calculated by adding the Antenna Factor and Cable Factor and subtracting the Amplifier Gain and Duty Cycle Correction Factor (if any) from the measured reading. The basic equation with a sample calculation is as follows:

$$FS = RA + AF + CL - AG$$

|       |                        |  |
|-------|------------------------|--|
| Where | FS = Field Strength    | CL = Cable Attenuation Factor (Cable Loss) |
|       | RA = Reading Amplitude | AG = Amplifier Gain                        |
|       | AF = Antenna Factor    |  |

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## 6.5 Measurement Result

Test Mode: GPS Link

Test Date : Aug. 01, 2008

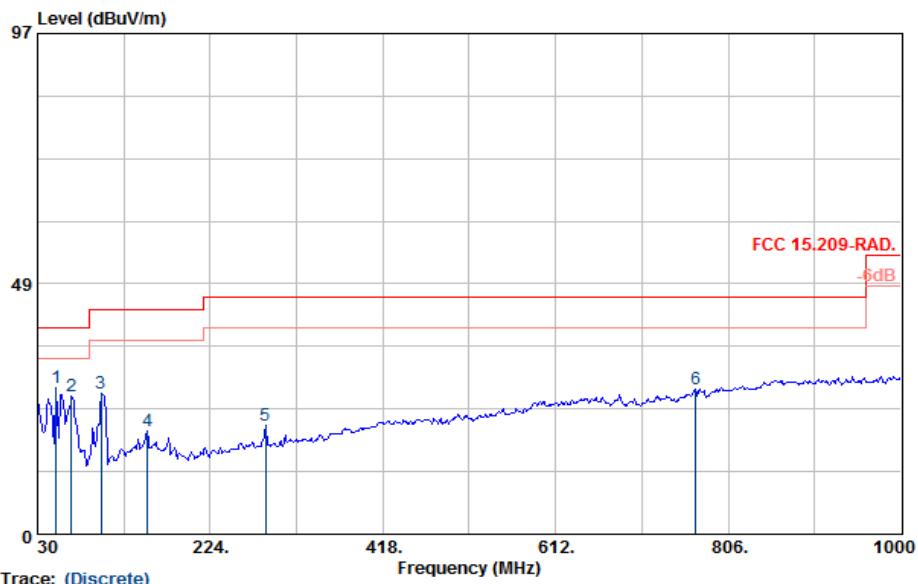
### Detector Function: Quasi-Peak/PK

Test By: Sky

Frequency Range: 30MHz-1000MHz

Temperature : 25 °C

Humidity : 65 %



Site : RF SITE  
Condition : FCC 15.209-RAD. 3m VULB9160 VERTICAL  
Project No. : ER/2008/70039  
Applicant : Nolan  
EUT Description : GPS Compass – GuideMate  
EUT Model : NGPSCPXXX  
Test Mode : GPS RX  
Temp./Humid. : 25/65  
Operator : SKY

| operator | SKY | ReadAntenna |       | Preamp Factor | Cable Loss |      | Level  | Limit Line | Over Limit | Over Limit Remark |
|----------|-----|-------------|-------|---------------|------------|------|--------|------------|------------|-------------------|
|          |     | Freq        | Level |               | Factor     | dB   |        |            |            |                   |
|          | MHz | dBuV        | dB/m  |               |            |      |        |            |            |                   |
| 1        |     | 51.34       | 42.54 | 12.54         | 27.57      | 0.84 | -14.19 | 28.35      | 40.00      | -11.65 Peak       |
| 2        |     | 67.83       | 42.22 | 11.53         | 28.09      | 0.96 | -15.60 | 26.62      | 40.00      | -13.38 Peak       |
| 3        |     | 101.78      | 44.17 | 10.38         | 28.37      | 1.12 | -16.87 | 27.30      | 43.50      | -16.20 Peak       |
| 4        |     | 153.19      | 32.94 | 13.69         | 28.11      | 1.42 | -13.00 | 19.94      | 43.50      | -23.56 Peak       |
| 5        |     | 286.08      | 34.29 | 12.85         | 28.00      | 1.89 | -13.26 | 21.03      | 46.00      | -24.97 Peak       |
| 6        |     | 769.14      | 31.98 | 21.26         | 28.21      | 3.15 | -3.80  | 28.18      | 46.00      | -17.82 Peak       |

**Remark :**

- (1) Measuring frequencies from 30 MHz to the 1GHz .
  - (2) Radiated emissions measured in frequency range from 30 MHz to 1000MHz were made with an instrument using Peak detector mode.
  - (3) Data of measurement within this frequency range shown “ - ” in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
  - (4) The IF bandwidth of SPA 30MHz to 1GHz was 100KHz.

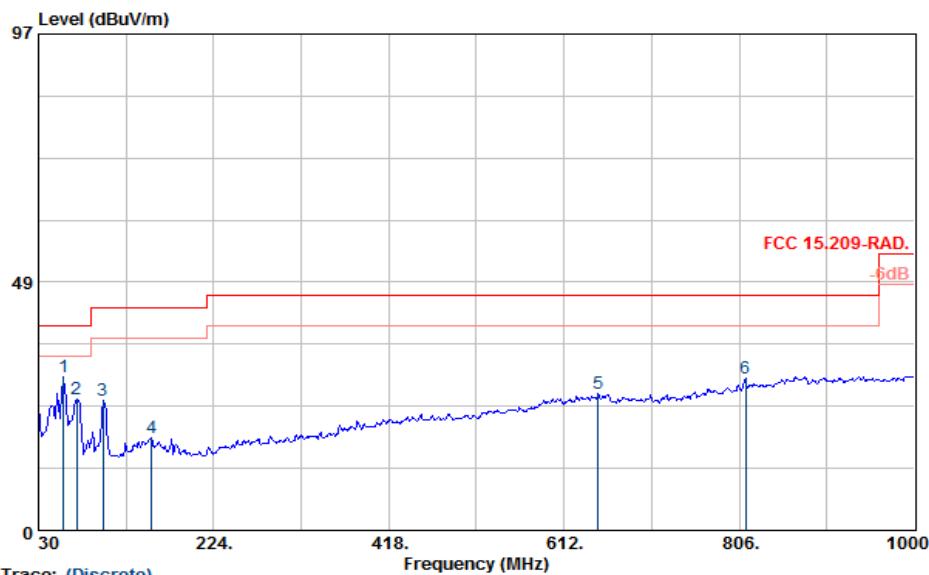
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Test Mode: GPS Link  
Detector Function: Quasi-Peak/PK  
Frequency Range: 30MHz-1000MHz

Test Date : Aug. 01, 2008  
Test By: Sky  
Temperature : 25 °C      Humidity : 65 %



| Site | Trace: (Discrete) |             |           |                 |           |           |              |          |                          |               |                   |       |            |            |        |    |
|------|-------------------|-------------|-----------|-----------------|-----------|-----------|--------------|----------|--------------------------|---------------|-------------------|-------|------------|------------|--------|----|
|      | Condition         | Project No. | Applicant | EUT Description | EUT Model | Test Mode | Temp./Humid. | Operator | ReadAntenna Level Factor | Preamp Factor | Cable Loss Factor | Level | Limit Line | Over Limit | Remark |    |
|      |                   |             |           |                 |           |           |              | Freq     | MHz                      | dBuV          | dB/m              | dB    | dB         | dBuV/m     | dBuV/m | dB |
| 1    | 58.13             | 44.58       | 12.56     | 28.06           | 0.84      | -14.66    | 29.92        | 40.00    | -10.08                   | Peak          |                   |       |            |            |        |    |
| 2    | 72.68             | 42.21       | 10.32     | 27.90           | 0.96      | -16.62    | 25.59        | 40.00    | -14.41                   | Peak          |                   |       |            |            |        |    |
| 3    | 101.78            | 42.35       | 10.38     | 28.37           | 1.12      | -16.87    | 25.48        | 43.50    | -18.02                   | Peak          |                   |       |            |            |        |    |
| 4    | 155.13            | 31.28       | 13.55     | 28.09           | 1.42      | -13.12    | 18.16        | 43.50    | -25.34                   | Peak          |                   |       |            |            |        |    |
| 5    | 649.83            | 31.81       | 19.65     | 27.46           | 2.86      | -4.95     | 26.86        | 46.00    | -19.14                   | Peak          |                   |       |            |            |        |    |
| 6    | 812.79            | 32.41       | 21.86     | 27.88           | 3.28      | -2.74     | 29.67        | 46.00    | -16.33                   | Peak          |                   |       |            |            |        |    |

#### Remark :

- (1) Measuring frequencies from 30 MHz to the 1GHz .
- (2) Radiated emissions measured in frequency range from 30 MHz to 1000MHz were made with an instrument using Peak detector mode.
- (3) Data of measurement within this frequency range shown “ - ” in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- (4) The IF bandwidth of SPA 30MHz to 1GHz was 100KHz.

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Test Mode: GPS+USB Data Link

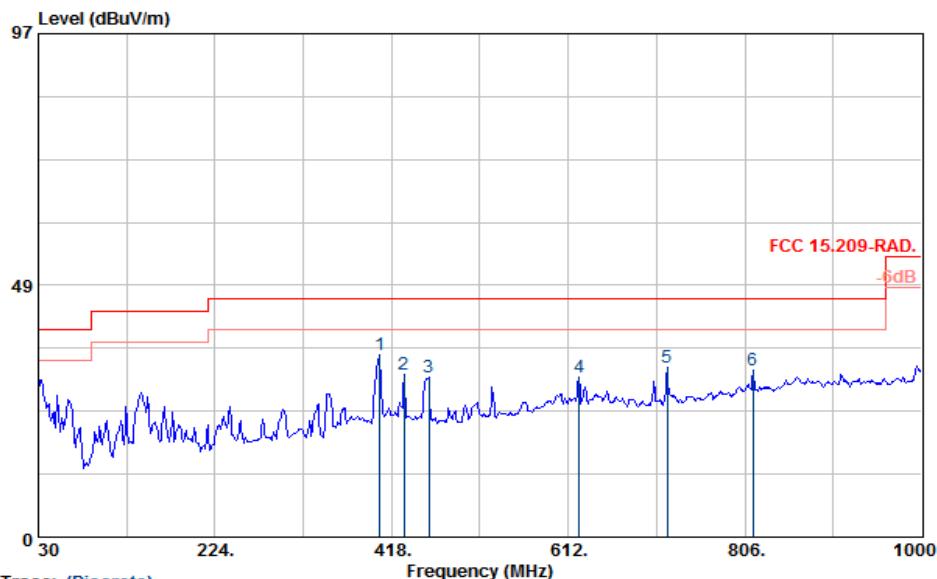
Test Date : Aug. 01, 2008

Detector Function: Quasi-Peak/PK

Test By: Sky

Frequency Range: 30MHz-1000MHz

Temperature : 25 °C      Humidity : 65 %



Site : RF SITE  
Condition : FCC 15.209-RAD. 3m VULB9160 VERTICAL  
Project No. : ER/2008/70039  
Applicant : Nolan  
EUT Description : GPS Compass – GuideMate  
EUT Model : NGPSCPXXX  
Test Mode : GPS + USB Data Link  
Temp./Humid. : 25/65  
Operator : Sky

| Freq | Read   | Antenna | Preamp | Cable  | Limit | Over   | Remark |       |             |
|------|--------|---------|--------|--------|-------|--------|--------|-------|-------------|
|      | MHz    | dBuV    | Level  | Factor | Loss  | Factor | Level  | Line  | Limit       |
| 1    | 405.39 | 45.02   | 15.43  | 27.50  | 2.21  | -9.86  | 35.16  | 46.00 | -10.84 Peak |
| 2    | 431.58 | 40.33   | 16.01  | 27.41  | 2.31  | -9.09  | 31.24  | 46.00 | -14.76 Peak |
| 3    | 458.74 | 39.37   | 16.47  | 27.48  | 2.40  | -8.61  | 30.76  | 46.00 | -15.24 Peak |
| 4    | 623.64 | 36.37   | 19.39  | 27.71  | 2.81  | -5.51  | 30.86  | 46.00 | -15.14 Peak |
| 5    | 720.64 | 37.45   | 20.47  | 28.21  | 3.01  | -4.73  | 32.72  | 46.00 | -13.28 Peak |
| 6    | 814.73 | 34.82   | 21.88  | 27.86  | 3.28  | -2.70  | 32.12  | 46.00 | -13.88 Peak |

## Remark :

- (1) Measuring frequencies from 30 MHz to the 1GHz .
- (2) Radiated emissions measured in frequency range from 30 MHz to 1000MHz were made with an instrument using Peak detector mode.
- (3) Data of measurement within this frequency range shown “ - ” in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- (4) The IF bandwidth of SPA 30MHz to 1GHz was 100KHz.

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Test Mode: GPS+USB Data Link

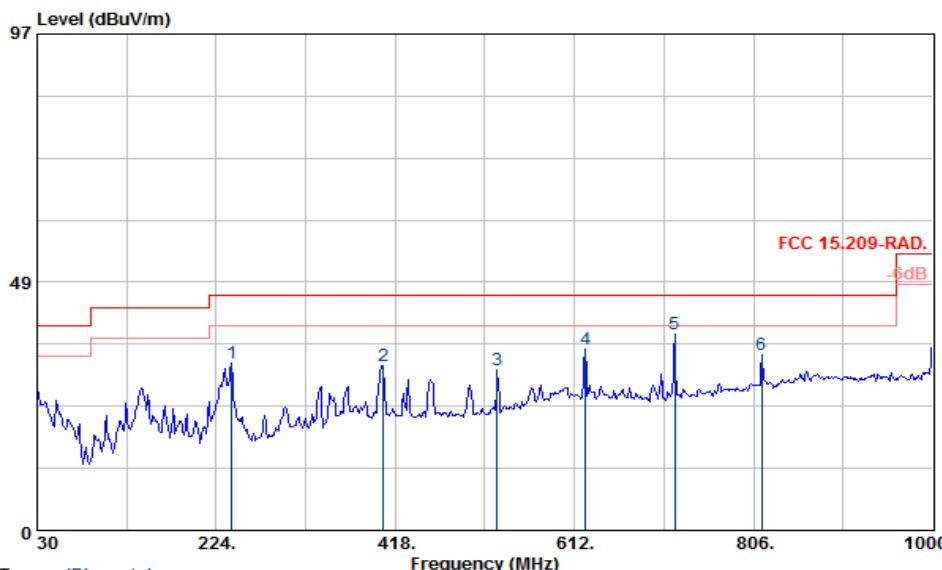
Test Date : Aug. 01, 2008

Detector Function: Quasi-Peak/PK

Test By: Sky

Frequency Range: 30MHz-1000MHz

Temperature : 25 °C      Humidity : 65 %



Trace: (Discrete)  
Site : RF SITE  
Condition : FCC 15.209-RAD. 3m VULB9160 HORIZONTAL  
Project No. : ER/2008/70039  
Applicant : Nolan  
EUT Description : GPS Compass – GuideMate  
EUT Model : NGPSCPXXX  
Test Mode : GPS + USB Data Link  
Temp./Humid. : 25/65  
Operator : Sky

|   | Freq   | Read  | Antenna | Preamp | Cable | Limit  | Over  | Remark |             |
|---|--------|-------|---------|--------|-------|--------|-------|--------|-------------|
|   | MHz    | Level | Factor  | Factor | Loss  | Factor | Line  | Limit  |             |
| 1 | 240.49 | 46.68 | 11.71   | 27.46  | 1.64  | -14.11 | 32.57 | 46.00  | -13.43 Peak |
| 2 | 405.39 | 42.08 | 15.43   | 27.50  | 2.21  | -9.86  | 32.22 | 46.00  | -13.78 Peak |
| 3 | 528.58 | 39.30 | 17.65   | 28.31  | 2.64  | -8.02  | 31.28 | 46.00  | -14.72 Peak |
| 4 | 623.64 | 40.77 | 19.39   | 27.71  | 2.81  | -5.51  | 35.26 | 46.00  | -10.74 Peak |
| 5 | 720.64 | 43.22 | 20.47   | 28.21  | 3.01  | -4.73  | 38.49 | 46.00  | -7.51 Peak  |
| 6 | 814.73 | 36.99 | 21.88   | 27.86  | 3.28  | -2.70  | 34.29 | 46.00  | -11.71 Peak |

## Remark :

- (1) Measuring frequencies from 30 MHz to the 1GHz .
- (2) Radiated emissions measured in frequency range from 30 MHz to 1000MHz were made with an instrument using Peak detector mode.
- (3) Data of measurement within this frequency range shown “ - ” in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- (4) The IF bandwidth of SPA 30MHz to 1GHz was 100KHz.

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