#### A1. GSM

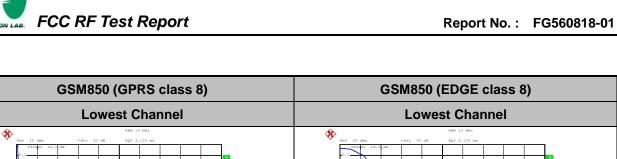
# Peak-to-Average Ratio

| Mode       | GSM850       |              | Limit: 13dB |
|------------|--------------|--------------|-------------|
| Mod.       | GPRS class 8 | EDGE class 8 | Result      |
| Lowest CH  | 0.24         | 2.84         |             |
| Middle CH  | 0.24         | 2.92         | PASS        |
| Highest CH | 0.20         | 2.92         |             |

Report No.: FG560818-01

| Mode       | GSM1900      |              | Limit: 13dB |
|------------|--------------|--------------|-------------|
| Mod.       | GPRS class 8 | EDGE class 8 | Result      |
| Lowest CH  | 0.20         | 3.28         |             |
| Middle CH  | 0.20         | 3.12         | PASS        |
| Highest CH | 0.24         | 3.36         |             |

SPORTON INTERNATIONAL INC. Page Number : A1-1 of 17





Trace 1 31.92 dBm 32.15 dBm 0.23 dB Peak Crest 10 % 1 % .1 %

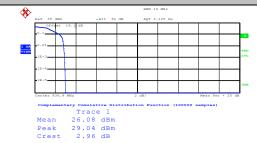
Trace 1 26.22 dBm 29.11 dBm 2.89 dB Mean Peak Crest

Date: 22.JUL.2015 10:19:34

#### Date: 22.JUL.2015 10:33:11

# **Middle Channel** \*

Trace 1 31.84 dBm 32.08 dBm 0.24 dB 0.16 dB 0.20 dB 0.24 dB 0.24 dB

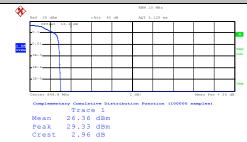


**Middle Channel** 

# **Highest Channel %**

Trace 1 32.04 dBm 32.29 dBm 0.25 dB

Date: 22.JUL.2015 10:20:03



**Highest Channel** 

Date: 22.JUL.2015 10:33:53

#### SPORTON INTERNATIONAL INC.

GSM1900 (GPRS class 8) GSM1900 (EDGE class 8) **Lowest Channel Lowest Channel** \* \* Trace 1 29.51 dBm 29.75 dBm 0.24 dB Trace 1 25.52 dBm 28.83 dBm 3.31 dB Mean Peak Crest Peak Crest 10 % 1 % .1 % Date: 22.JUL.2015 10:49:41 Date: 22.JUL.2015 11:00:06 **Middle Channel Middle Channel** \* \* Trace 1 29.79 dBm 30.03 dBm 0.24 dB 0.16 dB 0.20 dB 0.20 dB 0.24 dB 2.40 dB 2.96 dB 3.12 dB 3.16 dB **Highest Channel Highest Channel %** \* Trace 1 29.52 dBm 29.75 dBm 0.23 dB Trace 1 25.47 dBm 28.90 dBm 3.43 dB Peak Crest Date: 22.JUL.2015 10:50:05 Date: 22.JUL.2015 11:00:35

TEL: 886-3-327-3456 FAX: 886-3-328-4978

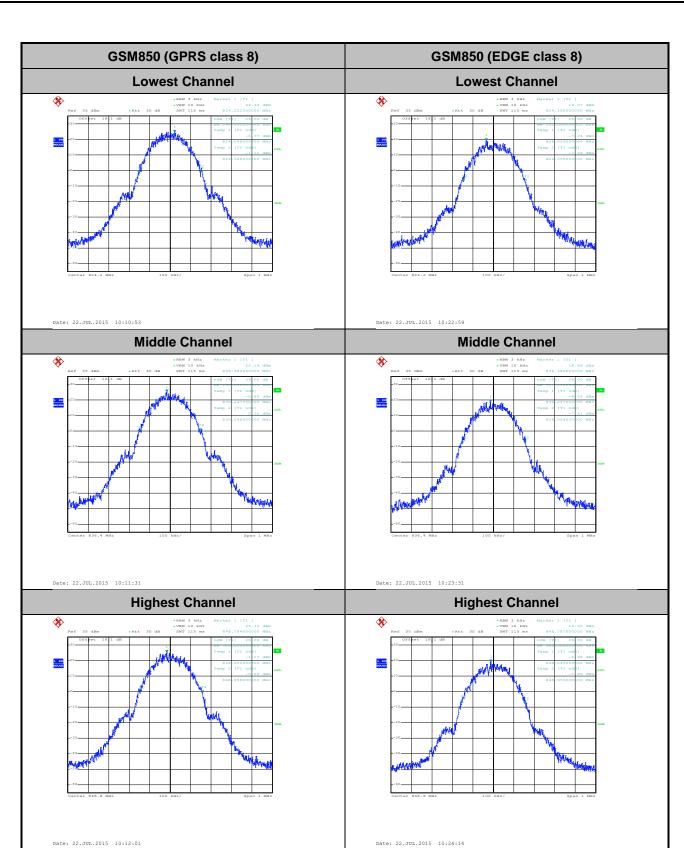
# 26dB Bandwidth

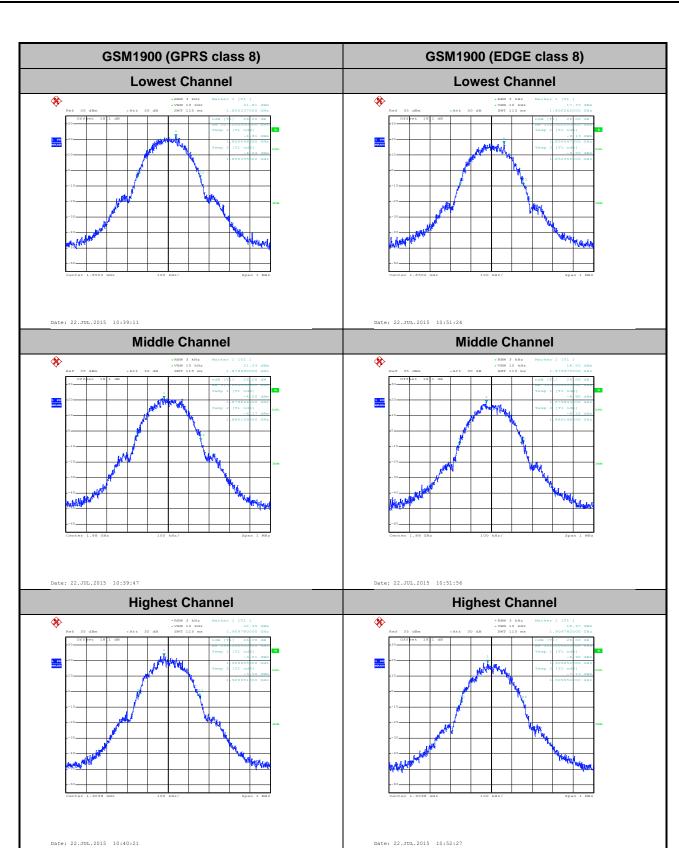
| Mode       | GSM850       |              |  |
|------------|--------------|--------------|--|
| Mod.       | GPRS class 8 | EDGE class 8 |  |
| Lowest CH  | 0.298        | 0.302        |  |
| Middle CH  | 0.299        | 0.307        |  |
| Highest CH | 0.306        | 0.308        |  |

Report No.: FG560818-01

| Mode       | GSM1900      |              |  |
|------------|--------------|--------------|--|
| Mod.       | GPRS class 8 | EDGE class 8 |  |
| Lowest CH  | 0.307        | 0.308        |  |
| Middle CH  | 0.315        | 0.305        |  |
| Highest CH | 0.296        | 0.302        |  |

SPORTON INTERNATIONAL INC. Page Number : A1-4 of 17





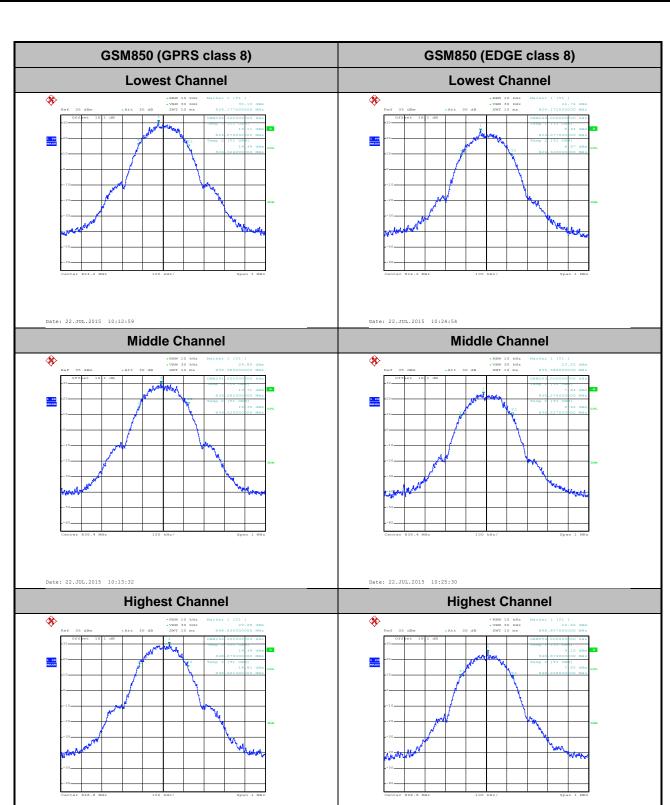
# Occupied Bandwidth

| Mode       | GSM850       |              |  |
|------------|--------------|--------------|--|
| Mod.       | GPRS class 8 | EDGE class 8 |  |
| Lowest CH  | 0.245        | 0.249        |  |
| Middle CH  | 0.241        | 0.253        |  |
| Highest CH | 0.242        | 0.254        |  |

Report No.: FG560818-01

| Mode       | GSM1900               |       |  |
|------------|-----------------------|-------|--|
| Mod.       | Mod. GPRS class 8 EDG |       |  |
| Lowest CH  | 0.245                 | 0.249 |  |
| Middle CH  | 0.242                 | 0.248 |  |
| Highest CH | 0.241                 | 0.247 |  |

**SPORTON INTERNATIONAL INC.** Page Number : A1-7 of 17



Date: 22.JUL.2015 10:14:07

TEL: 886-3-327-3456 FAX: 886-3-328-4978 Date: 22.JUL.2015 10:26:03

GSM1900 (GPRS class 8) GSM1900 (EDGE class 8) **Lowest Channel Lowest Channel** Date: 22.JUL.2015 10:41:31 Date: 22.JUL.2015 10:53:12 **Middle Channel Middle Channel Highest Channel Highest Channel %** 

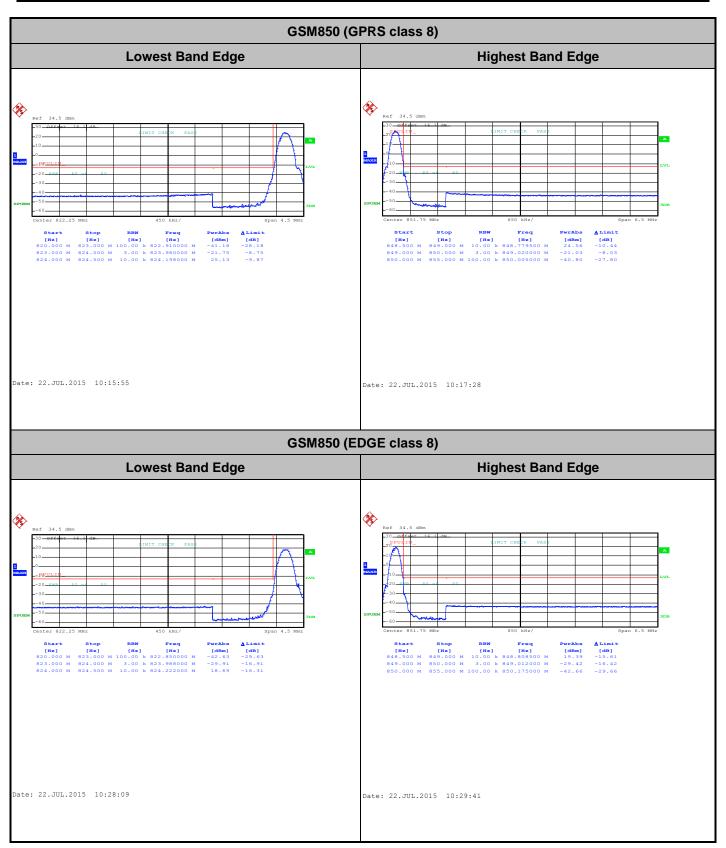
Date: 22.JUL.2015 10:42:39

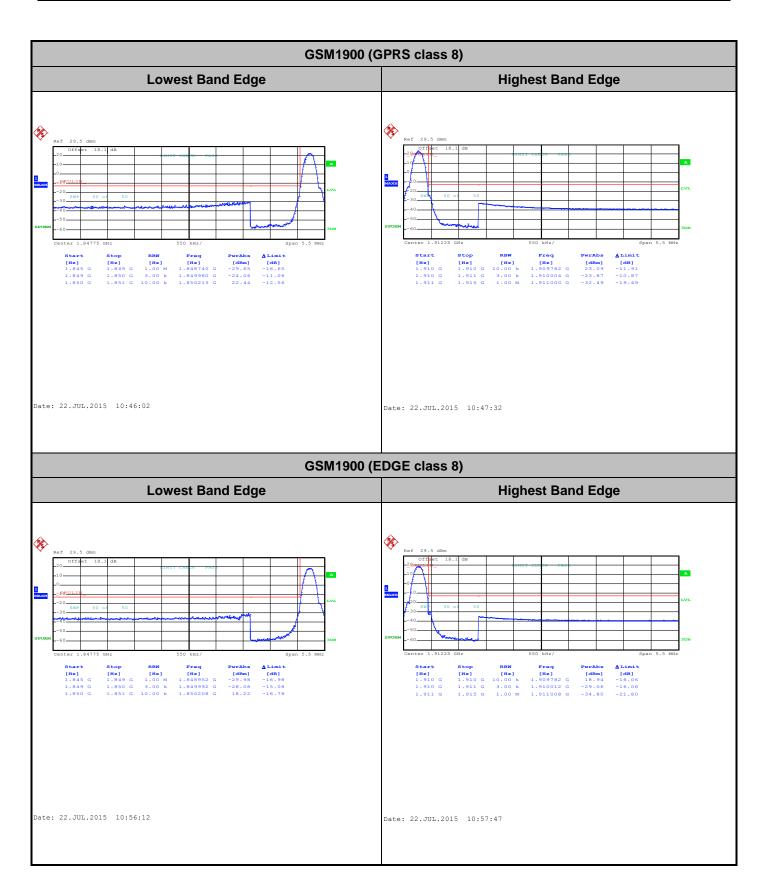
TEL: 886-3-327-3456 FAX: 886-3-328-4978

# **Conducted Band Edge**

SPORTON INTERNATIONAL INC.

TEL: 886-3-327-3456 FAX: 886-3-328-4978 Page Number : A1-10 of 17



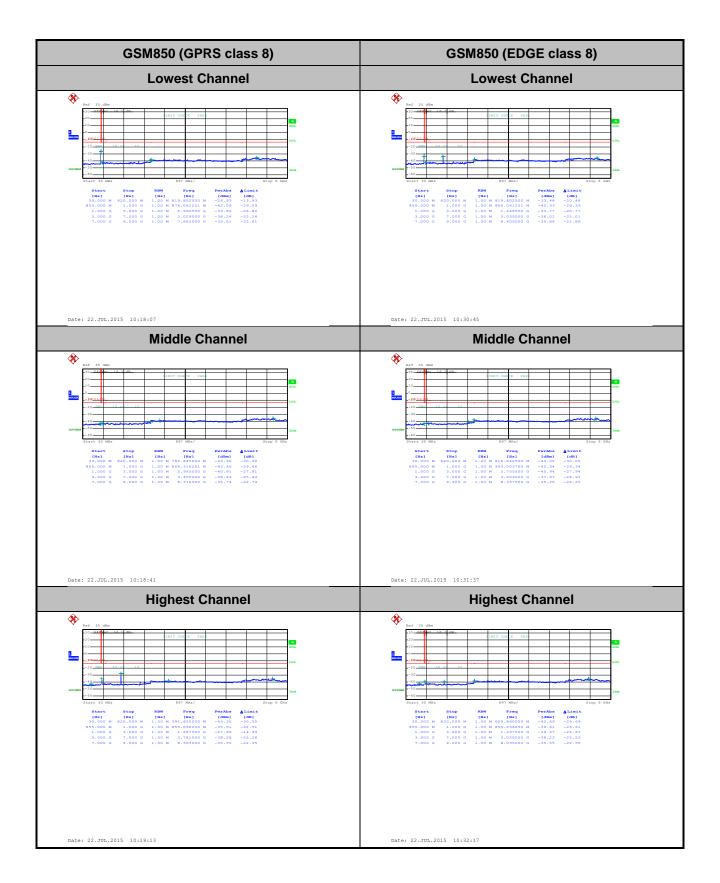


# **Conducted Spurious Emission**

SPORTON INTERNATIONAL INC.

TEL: 886-3-327-3456 FAX: 886-3-328-4978 Page Number : A1-13 of 17





GSM1900 (GPRS class 8) GSM1900 (EDGE class 8) **Lowest Channel Lowest Channel** \* \* Date: 22.JUL.2015 10:48:11 Date: 22.JUL.2015 10:58:31 **Middle Channel Middle Channel Highest Channel Highest Channel %** \*

Date: 22.JUL.2015 10:49:21

TEL: 886-3-327-3456 FAX: 886-3-328-4978 Date: 22.JUL.2015 10:59:43

#### Frequency Stability

| Test Conditions  | Middle Channel    | GSM850<br>(GPRS class 8) | GSM850<br>(EDGE class 8) | Limit<br>2.5ppm |
|------------------|-------------------|--------------------------|--------------------------|-----------------|
| Temperature (°C) | Voltage (Volt)    | Deviation                | on (ppm)                 | Result          |
| 50               | Normal Voltage    | 0.0108                   | 0.0084                   |                 |
| 40               | Normal Voltage    | 0.0036                   | 0.0048                   |                 |
| 30               | Normal Voltage    | 0.0036                   | 0.0024                   |                 |
| 20(Ref.)         | Normal Voltage    | 0.0000                   | 0.0000                   |                 |
| 10               | Normal Voltage    | 0.0012                   | 0.0036                   | _               |
| 0                | Normal Voltage    | 0.0024                   | 0.0072                   |                 |
| -10              | Normal Voltage    | 0.0060                   | 0.0371                   | PASS            |
| -20              | Normal Voltage    | 0.0048                   | 0.0024                   |                 |
| -30              | Normal Voltage    | 0.0012                   | 0.0060                   |                 |
| 20               | Maximum Voltage   | 0.0048                   | 0.0060                   |                 |
| 20               | Normal Voltage    | 0.0096                   | 0.0036                   |                 |
| 20               | Battery End Point | 0.0084                   | 0.0012                   |                 |

TEL: 886-3-327-3456 FAX: 886-3-328-4978

| Test Conditions  | Middle Channel    | GSM1900<br>(GPRS class 8) | GSM1900<br>(EDGE class 8) | Limit<br>Note 2. |
|------------------|-------------------|---------------------------|---------------------------|------------------|
| Temperature (°C) | Voltage (Volt)    | Deviation (ppm)           |                           | Result           |
| 50               | Normal Voltage    | 0.0170                    | 0.0011                    |                  |
| 40               | Normal Voltage    | 0.0021                    | 0.0032                    |                  |
| 30               | Normal Voltage    | 0.0181                    | 0.0005                    |                  |
| 20(Ref.)         | Normal Voltage    | 0.0000                    | 0.0000                    |                  |
| 10               | Normal Voltage    | 0.0186                    | 0.0016                    |                  |
| 0                | Normal Voltage    | 0.0005                    | 0.0005                    |                  |
| -10              | Normal Voltage    | 0.0191                    | 0.0011                    | PASS             |
| -20              | Normal Voltage    | 0.0176                    | 0.0021                    |                  |
| -30              | Normal Voltage    | 0.0016                    | 0.0016                    |                  |
| 20               | Maximum Voltage   | 0.0027                    | 0.0027                    |                  |
| 20               | Normal Voltage    | 0.0005                    | 0.0037                    |                  |
| 20               | Battery End Point | 0.0011                    | 0.0021                    |                  |

#### Note:

- 1. Normal Voltage = 12V. ; Battery End Point (BEP) = 5 V. ; Maximum Voltage =18 V
- **2.** The frequency fundamental emissions stay within the authorized frequency block based on the frequency deviation measured is small.

TEL: 886-3-327-3456 FAX: 886-3-328-4978