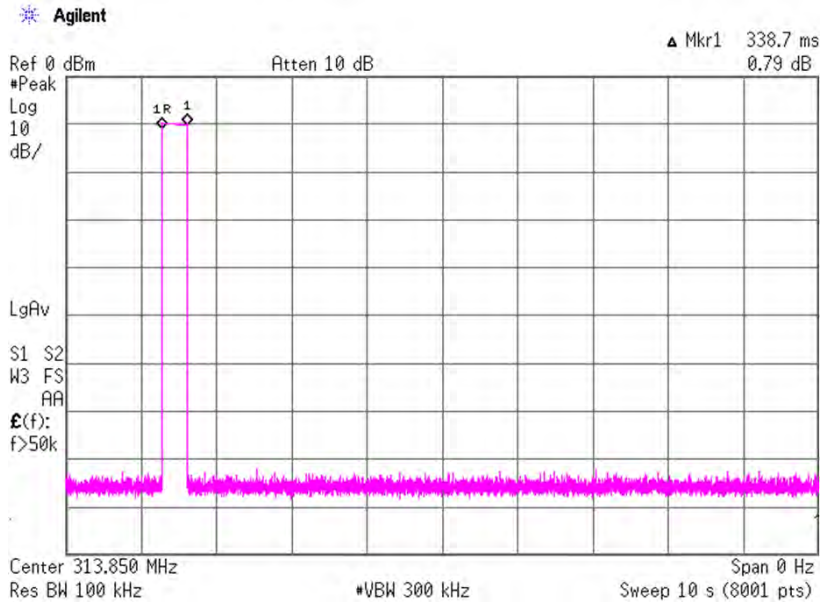


**Automatically deactivate: FCC 15.231(a)(1)**

UL Japan, Inc.  
 Shonan EMC Lab. No.3 Semi-Anechoic Chamber  
 Report No. : 32EE0044-SH-01-A-R1  
 Regulation : FCC Part15C Section 15.231(a)(1)  
 Regulation : RSS-210 A1.1.1(a)  
 Test Distance : 3m  
 Date : January 26, 2012  
 Temperature : 21deg.C  
 Humidity : 33%RH  
 ENGINEER : Tatsuya Arai

Company : Honda Lock Mfg. Co., Ltd.  
 Equipment : Transmitter of Keyless Entry  
 Model : HLIK6-1T  
 Sample No. : 1  
 Power : DC 3.0V (Battery)  
 Mode : Transmitting ( 313.85 MHz)

| Time of Transmitting [sec] | Limit [sec] | Result |
|----------------------------|-------------|--------|
| 0.3387                     | 5           | PASS   |



## Radiated Emission (Electric Field Strength of Fundamental and Spurious Emission)

UL Japan, Inc.

Shonan EMC Lab. No.3 Semi-Anechoic Chamber

Report No. : 32EE0044-SH-01-A-R1

Company : Honda Lock Mfg. Co., Ltd.  
 Equipment : Transmitter of Keyless Entry  
 Model : HLIK6-1T  
 Sample No. : 2  
 Power : DC 3.0V (Battery)  
 Mode : Transmitting ( 313.85 MHz)

Regulation : FCC Part15C Section 15.231(b), 15.209  
 Regulation : RSS-210 A1.1 (Table A), A1.1.2  
 Test Distance : 3m  
 Date : December 28, 2011 : January 8, 2012  
 Temperature : 24deg.C : 20deg.C  
 Humidity : 21%RH : 25%RH  
 ENGINEER : Kenichi Adachi : Tatsuya Arai

### PK with Duty factor

| Frequency<br>[MHz] | Reading<br>[dBuV] |      | Ant<br>Factor<br>[dB/m] | Loss<br>[dB] | Gain<br>[dB] | Duty<br>Factor<br>[dB] | Result<br>[dBuV/m] |      | Limit<br>[dBuV/m] | Margin<br>[dB] |      | Remark  |
|--------------------|-------------------|------|-------------------------|--------------|--------------|------------------------|--------------------|------|-------------------|----------------|------|---------|
|                    | Hor               | Ver  |                         |              |              |                        | Hor                | Ver  |                   | Hor            | Ver  |         |
| 313.850            | 90.0              | 87.1 | 14.3                    | 8.7          | 31.9         | -5.9                   | 75.2               | 72.3 | 75.6              | 0.4            | 3.3  | Carrier |
| 627.700            | 42.0              | 38.9 | 19.4                    | 9.9          | 31.9         | -5.9                   | 33.5               | 30.4 | 55.6              | 22.1           | 25.2 | Outside |
| 941.550            | 42.3              | 38.4 | 22.8                    | 10.8         | 30.7         | -5.9                   | 39.3               | 35.4 | 55.6              | 16.3           | 20.2 | Outside |
| 1255.400           | 52.7              | 52.9 | 24.6                    | 2.8          | 40.7         | -5.9                   | 33.5               | 33.7 | 55.6              | 22.1           | 21.9 | Outside |
| 1569.250           | 56.8              | 57.7 | 25.3                    | 3.1          | 40.9         | -5.9                   | 38.4               | 39.3 | 53.9              | 15.5           | 14.6 | Inside  |
| 1883.100           | 52.7              | 49.4 | 25.9                    | 3.4          | 41.1         | -5.9                   | 35.0               | 31.7 | 55.6              | 20.6           | 23.9 | Outside |
| 2196.950           | 62.6              | 57.8 | 26.7                    | 3.6          | 41.1         | -5.9                   | 45.9               | 41.1 | 55.6              | 9.7            | 14.5 | Outside |
| 2510.800           | 63.1              | 59.7 | 27.6                    | 4.0          | 41.1         | -5.9                   | 47.7               | 44.3 | 55.6              | 7.9            | 11.3 | Outside |
| 2824.650           | 52.1              | 50.1 | 28.3                    | 4.4          | 41.3         | -5.9                   | 37.6               | 35.6 | 53.9              | 16.3           | 18.3 | Inside  |
| 3138.500           | 63.9              | 61.0 | 28.9                    | 4.4          | 41.5         | -5.9                   | 49.8               | 46.9 | 55.6              | 5.8            | 8.7  | Outside |

Result = Reading + Ant Factor + Loss (Cable+Attenuator+Filter) - Gain(Amplifier) + Duty factor (Refer to Duty factor data sheet)

### PK

| Frequency<br>[MHz] | Reading<br>[dBuV] |      | Ant<br>Factor<br>[dB/m] | Loss<br>[dB] | Gain<br>[dB] | Duty<br>Factor<br>[dB] | Result<br>[dBuV/m] |      | Limit<br>[dBuV/m] | Margin<br>[dB] |      | Remark<br>Inside or Outside<br>of Restricted Bands |
|--------------------|-------------------|------|-------------------------|--------------|--------------|------------------------|--------------------|------|-------------------|----------------|------|----------------------------------------------------|
|                    | Hor               | Ver  |                         |              |              |                        | Hor                | Ver  |                   | Hor            | Ver  |                                                    |
| 1255.400           | 52.7              | 52.9 | 24.6                    | 2.8          | 40.7         | -                      | 39.4               | 39.6 | 75.6              | 36.2           | 36.0 | Outside                                            |
| 1569.250           | 56.8              | 57.7 | 25.3                    | 3.1          | 40.9         | -                      | 44.3               | 45.2 | 73.9              | 29.6           | 28.7 | Inside                                             |
| 1883.100           | 52.7              | 49.4 | 25.9                    | 3.4          | 41.1         | -                      | 40.9               | 37.6 | 75.6              | 34.7           | 38.0 | Outside                                            |
| 2196.950           | 62.6              | 57.8 | 26.7                    | 3.6          | 41.1         | -                      | 51.8               | 47.0 | 75.6              | 23.8           | 28.6 | Outside                                            |
| 2510.800           | 63.1              | 59.7 | 27.6                    | 4.0          | 41.1         | -                      | 53.6               | 50.2 | 75.6              | 22.0           | 25.4 | Outside                                            |
| 2824.650           | 52.1              | 50.1 | 28.3                    | 4.4          | 41.3         | -                      | 43.5               | 41.5 | 73.9              | 30.4           | 32.4 | Inside                                             |
| 3138.500           | 63.9              | 61.0 | 28.9                    | 4.4          | 41.5         | -                      | 55.7               | 52.8 | 75.6              | 19.9           | 22.8 | Outside                                            |

Result = Reading + Ant Factor + Loss (Cable+Attenuator+Filter) - Gain(Amplifier)

### REMARKS

Antenna Type: 30M-300MHz Biconical / 300M-1000MHz Logperiodic / 1G-5GHz Horn

\*Other frequency noises omitted in this report were not seen or had enough margin (more than 20dB).

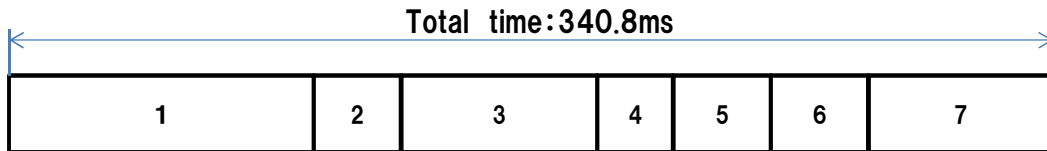
\*Below 30MHz: No noise detected signal from EUT.

## Duty Cycle (Fundamental)

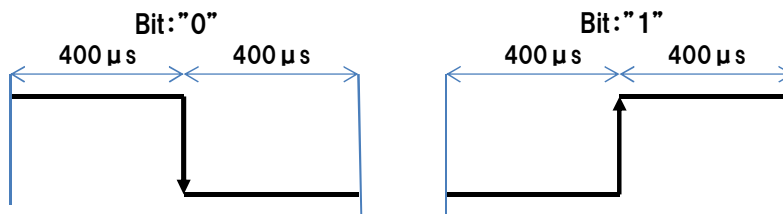
UL Japan, Inc.  
SHONAN EMC Lab.  
Report No. : 32EE0044-SH-01-A-R1

Company : Honda Lock Mfg. Co., Ltd.  
Equipment : Transmitter of Keyless Entry  
Model : HLIK6-1T  
Sample No. : 2  
Power : DC 3.0V (Battery)  
Mode : Transmitting ( 313.85 MHz)

Regulation : FCC Part15C Section 15.231(b), 15.35(c)  
Regulation : RSS-210 & RSS-Gen  
Test Distance : 3m  
Date : January 26, 2012  
Temperature : 21deg.C  
Humidity : 33%RH  
ENGINEER : Tatsuya Arai

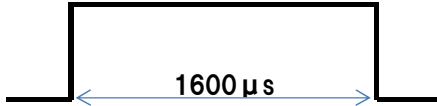


•Data(No.1,2,3,5,6,7)



※Manchester code

•Data(No.4)



| ON time<br>[msec] | Cycle<br>[msec] | Duty<br>(On time /<br>Cycle) | Duty<br>[dB] |
|-------------------|-----------------|------------------------------|--------------|
| 50.8              | 100             | 0.51                         | -5.9         |

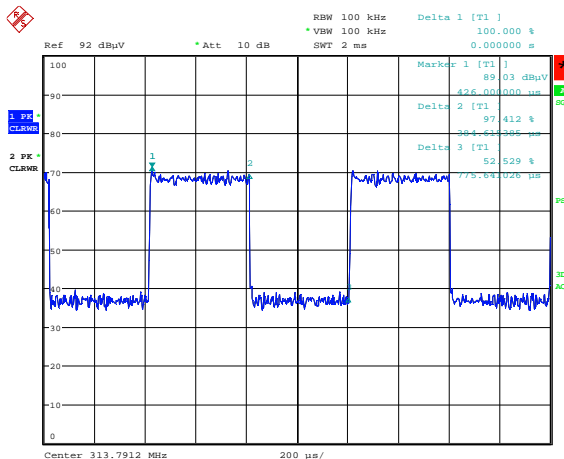
\*ON time = (100ms - 1.6ms) / 2 + 1.6ms = 50.8ms

The worst case for any 100msec is a period including No.4

\*Duty = 20log (On time / Cycle)

### Reference data

\*ON time:384.6ms, Cycle:775.6ms, Duty Cycle:0.50



## 20dB Bandwidth: FCC 15.231(c)

UL Japan, Inc.

Shonan EMC Lab. No.3 Semi-Anechoic Chamber

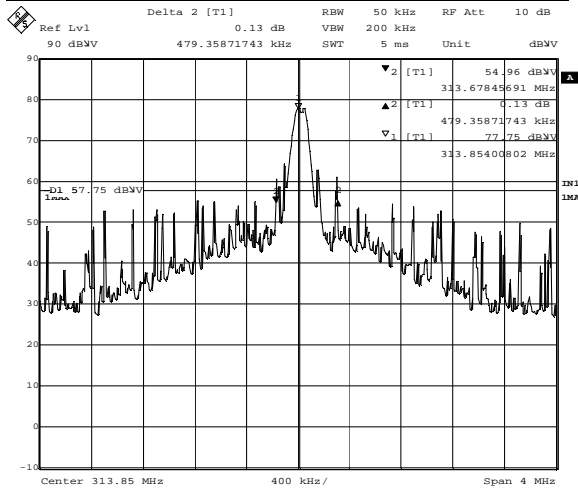
Report No. : 32EE0044-SH-01-A-R1

Company : Honda Lock Mfg. Co., Ltd.  
 Equipment : Transmitter of Keyless Entry  
 Model : HLIK6-1T  
 Sample No. : 2  
 Power : DC 3.0V (Battery)  
 Mode : Transmitting ( 313.85 MHz)

Regulation : FCC Part15C Section 15.231(c)  
 Regulation : RSS-210 A1.1.3  
 Test Distance : 3m  
 Date : December 28, 2011  
 Temperature : 24deg.C  
 Humidity : 21%RH  
 ENGINEER : Kenichi Adachi

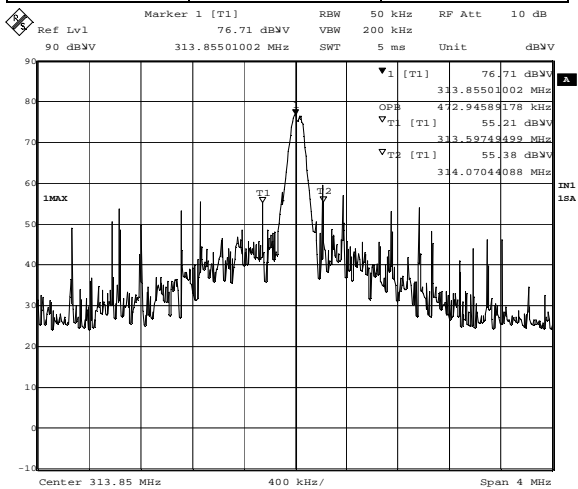
Bandwidth Limit : fundamental Frequency 313.85 X 0.25% = 784.625kHz

| 20dB Bandwidth<br>[kHz] | Bandwidth Limit<br>[kHz] | Result |
|-------------------------|--------------------------|--------|
| 479.3587174             | 784.625                  | PASS   |



Bandwidth Limit : fundamental Frequency 313.85 X 0.25% = 784.625kHz

| 99% Occupied<br>Bandwidth<br>[kHz] | Bandwidth Limit<br>[kHz] | Result |
|------------------------------------|--------------------------|--------|
| 472.9458918                        | 784.625                  | PASS   |



## APPENDIX 2 Test Instruments

### EMI test equipment

| Control No.                    | Instrument                | Manufacturer                                       | Model No                                   | Serial No               | Test Item | Calibration Date * Interval(month) |
|--------------------------------|---------------------------|----------------------------------------------------|--------------------------------------------|-------------------------|-----------|------------------------------------|
| SAF-03                         | Pre Amplifier             | SONOMA                                             | 310N                                       | 290213                  | RE        | 2011/02/17 * 12                    |
| SAT6-03                        | Attenuator                | JFW                                                | 50HF-006N                                  | -                       | RE        | 2011/02/17 * 12                    |
| SBA-03                         | Biconical Antenna         | Schwarzbeck                                        | BBA9106                                    | 91032666                | RE        | 2011/10/23 * 12                    |
| SCC-C1/C2/C3/C4/C5/C10/SRSE-03 | Coaxial Cable&RF Selector | Fujikura/Fujikura/Suhner/Suhner/Suhner/Suhner/TOYO | 8D2W/12DSFA/141PE/141PE/141PE/141PE/NS4906 | -/0901-271(RF Selector) | RE        | 2011/04/28 * 12                    |
| SLA-03                         | Logperiodic Antenna       | Schwarzbeck                                        | UHALP9108A                                 | UHALP 9108-A0901        | RE        | 2011/10/23 * 12                    |
| SOS-05                         | Humidity Indicator        | A&D                                                | AD-5681                                    | 4062518                 | RE        | 2011/02/23 * 12                    |
| STR-03                         | Test Receiver             | Rohde & Schwarz                                    | ESI40                                      | 100054/040              | RE        | 2011/07/28 * 12                    |
| SJM-10                         | Measure                   | PROMART                                            | SEN1935                                    | -                       | RE        | -                                  |
| SAEC-03(NSA)                   | Semi-Anechoic Chamber     | TDK                                                | SAEC-03(NSA)                               | 3                       | RE        | 2011/09/23 * 12                    |
| COTS-SEMI-1                    | EMI Software              | TSJ                                                | TEPTO-DV(RE,CE,RFLMF)                      | -                       | RE        | -                                  |
| SAF-06                         | Pre Amplifier             | TOYO Corporation                                   | TPA0118-36                                 | 1440491                 | RE        | 2011/07/19 * 12                    |
| SCC-G03                        | Coaxial Cable             | Suhner                                             | SUCOFLEX 104A                              | 46499/4A                | RE        | 2011/04/28 * 12                    |
| SCC-G23                        | Coaxial Cable             | Suhner                                             | SUCOFLEX 104                               | 297342/4                | RE        | 2011/05/27 * 12                    |
| SHA-03                         | Horn Antenna              | Schwarzbeck                                        | BBHA9120D                                  | 9120D-739               | RE        | 2011/08/28 * 12                    |
| SAF-01                         | Pre Amplifier             | SONOMA                                             | 310N                                       | 290211                  | RE        | 2011/02/17 * 12                    |
| SAT6-07                        | Attenuator                | JFW                                                | 50HF-006N                                  | -                       | RE        | 2011/02/17 * 12                    |
| SCC-A2/A4/A6/A7/A8/A13/SRSE-01 | Coaxial Cable&RF Selector | Fujikura/Fujikura/Suhner/Suhner/Suhner/Suhner/TOYO | 8D2W/12DSFA/141PE/141PE/141PE/141PE/NS4906 | -/0901-269(RF Selector) | RE        | 2011/04/28 * 12                    |
| SLP-02                         | Loop Antenna              | Rohde & Schwarz                                    | HFH2-Z2                                    | 100218                  | RE        | 2011/10/19 * 12                    |
| SOS-01                         | Humidity Indicator        | A&D                                                | AD-5681                                    | 4062555                 | RE        | 2011/02/23 * 12                    |
| STR-01                         | Test Receiver             | Rohde & Schwarz                                    | ESU40                                      | 100093                  | RE        | 2011/10/22 * 12                    |
| SJM-12                         | Measure                   | PROMART                                            | SEN1935                                    | -                       | RE        | -                                  |
| KSA-08                         | Spectrum Analyzer         | Agilent                                            | E4446A                                     | MY46180525              | RE        | 2011/02/02 * 12                    |
|                                |                           |                                                    |                                            |                         |           |                                    |
|                                |                           |                                                    |                                            |                         |           |                                    |

The expiration date of the calibration is the end of the expired month .  
As for some calibrations performed after the tested dates , those test equipment have been controlled by means of an unbroken chains of calibrations .

All equipment is calibrated with valid calibrations . Each measurement data is traceable to the national or international standards .

Test Item :

RE: Radiated emission