EMI TEST REPORT

Test Report No. : 25FE0137-YK-1

Applicant	:	**Sokkia Co., Ltd.**
Type of Equipment	:	**Blue Stick**
Model No.	:	**BS01**
FCC ID	:	**S6MBS01**
Test Standard	:	**FCC Part15 Subpart C, Section 15.247: 2005**
Test Result	:	**Complied**

1. This test report shall not be reproduced except in full, without the written approval of UL Apex Co., Ltd.
2. The results in this report apply only to the sample tested.
3. This equipment is in compliance with above regulation. We hereby certify that the data contain a true representation of the EMC profile.
4. The test results in this test report are traceable to the national or international standards.

Date of test: February 3, 21 and March 7, 2005

Tested by: Ichiro Isozaki & Toyokazu Imamura

Approved by: Osamu Watatani
Site Manager of Yamakita EMC Lab.

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1 Applicant Information

Company Name : Sokkia Co., Ltd.

Brand Name : SOKKIA

Address : 260-63, Hase, Atsugi-shi, Kanagawa-ken, 243-0036 JAPAN

Telephone Number : +81-46-248-0068

Facsimile Number : +81-46-247-6866

Contact Person : Eiji Takeuchi

2 Product Description

Type of Equipment : Blue Stick

Model No. : BS01

Serial No. : 0000792

Country of Manufacture : Japan

Receipt Date of Sample : February 3, 2005

Condition of EUT : Engineering Prototype
(Not for Sale: This sample is equivalent to mass-produced items.)

Model: BS01 (referred to as the EUT in this report) is a Blue Stick.

The clock frequency used in EUT: 13MHz (CPU)

Equipment type	:	Transceiver
Frequency of operation	:	2402 - 2480 MHz
Band width	:	79 MHz
Channel spacing	:	1 MHz
Channel number	:	79 channels
Type of modulation	:	FHSS
Antenna type	:	On board pattern antenna
Antenna connector type	:	None
Antenna gain	:	0dBi
Mode of operation	:	Duplex
Emission Designation	:	79M0F1D/Q1D/F7D/Q7D
Other clock frequency	:	26MHz
Operation temperature range	:	0 ~ 40 deg. C.

FCC Part15.31 (e)
This test was performed with the New Battery (DC 3V) and the constant voltage was supplied to this EUT during the tests. Therefore, this EUT complies with the requirement.

FCC Part15.203 Antenna requirement
It is impossible for end users to replace the antenna, because the antenna is mounted inside of the EUT. Therefore, the equipment complies with the requirement.

FCC Part15.207 Conducted emission
This test is not applicable since the EUT is intended to be mounted in a battery-drive device only.

3 Test Specification, Procedures and Results

3.1 Test specification

Test specification : FCC Part15 Subpart C: 2005
Title : FCC 47CFR Part15 Radio Frequency Device Subpart C Intentional Radiators
Section 15.207 Conducted limits: 2005
Section 15.247 Operation within the bands 902-928MHz, 2400-2483.5MHz, and 5725-5850MHz: 2005

3.2 Procedures & Results

Item	Test Procedure	Specification	Remarks	Deviation	Worst Margin	Results
Conducted emission	ANSI C63.4:2003 7. AC powerline conducted emission measurements	Section 15.207	-	N/A *1	-	N/A
Carrier Frequency Separation	ANSI C63.4:2003 13. Measurement of intentional radiators	Section15.247(a)(1)	Conducted	N/A	*See data.	Complied
20dB Bandwidth	ANSI C63.4:2003 13. Measurement of intentional radiators	Section15.247(a)(1)	Conducted	N/A		Complied
Number of Hopping Frequency	ANSI C63.4:2003 13. Measurement of intentional radiators	Section15.247(a)(1)(iii)	Conducted	N/A		Complied
Dwell time	ANSI C63.4:2003 13.Measurement of intentional radiators	Section15.247(a)(1)(iii)	Conducted	N/A		Complied
Maximum Peak Output Power	ANSI C63.4:2003 13. Measurement of intentional radiators	Section15.247(b)(1)	Conducted	N/A		Complied
Spurious Emission & Band Edge Compliance	ANSI C63.4:2003 13. Measurement of intentional radiators	Section15.247(d)	Conducted/ Radiated	N/A	2.3dB (4804MHz, AV, Transmitting 2402MHz)	Complied

The measurements also referred to FCC Public Notice DA 00-705 "Guidance on Measurement for Frequency Hopping Spread Spectrum Systems".

*1) This test is not applicable since the EUT is intended to be mounted in a battery-drive device only.
* No addition, exclusion nor deviation has been made from the standard.

3.3 Uncertainty

Radiated emission
The measurement uncertainty (with 95% confidence level) for this test using Biconical antenna is ±4.8dB.
The measurement uncertainty (with 95% confidence level) for this test using Logperiodic antenna is ±5.2dB.
The measurement uncertainty (with 95% confidence level) for this test using Horn antenna is ±6.6dB.
The data listed in this report meets the limits unless the uncertainty is taken into consideration.

3.4 Test Location

UL Apex Co., Ltd. Yamakita EMC Lab.
907, Kawanishi, Yamakita-machi, Ashigarakami-gun, Kanagawa-ken 258-0124 JAPAN
Telephone number : +81 465 77 1011
Facsimile number : +81 465 77 2112
NVLAP Lab. code : 200441-0

No. 1 test site has been fully described in a report submitted to FCC office, and accepted on September 20, 2002 (Registration No.: 95486).
IC Registration No. : IC3489

No. 2 test site has been fully described in a report submitted to FCC office, and accepted on April 4, 2005 (Registration No.: 466226).
IC Registration No. : IC3489-2

No. 1 anechoic chamber has been fully described in a report submitted to FCC office, and accepted on November 8, 2002 (Registration No.: 95967).
IC Registration No. : IC3489-B

Test room	Width x Depth x Height (m)	Test room	Width x Depth x Height (m)
No.1 shielded room	8.0 x 5.0 x 2.5	No.1 EMS lab. (Semi-anechoic chamber)	10.0 x 7.5 x 5.7
No.2 shielded room	5.0 x 4.0 x 2.5		
No.3 shielded room	4.0 x 5.0 x 2.7		

4 System Test Configuration

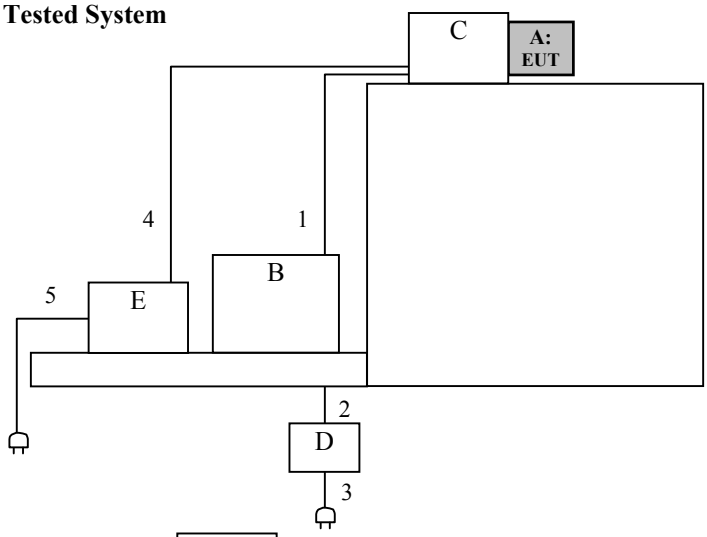
4.1 Justification

The system was configured in typical fashion (as a customer would normally use it) for testing.

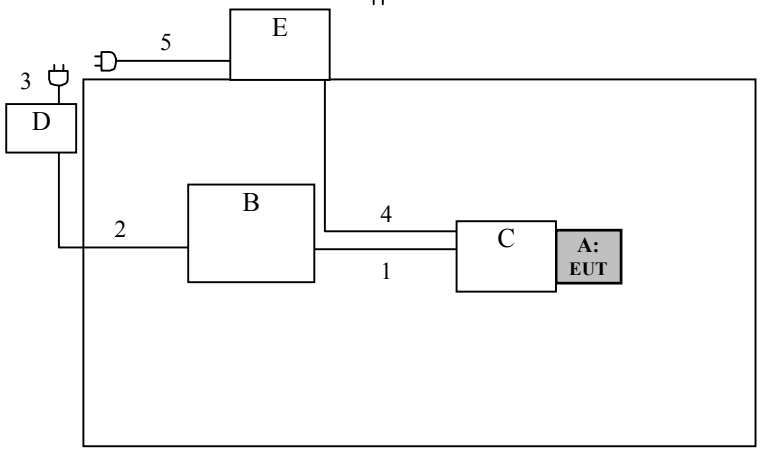
Test mode: Transmitting mode (Packet size: DH5)
- Low channel : 2402MHz
- Middle channel : 2441MHz
- High channel : 2480MHz
- Inquiry
- Page
- Hopping

4.2 Configuration of Tested System

Front View



Top View



* Test data was taken under worse case conditions.

Description of EUT and support equipment

No.	Item	Model number	Serial number	Manufacturer	FCC ID (Remarks)
A	Blue Stick	BS01	0000792	ADC Technology	S6MBS01 (EUT)
B	Notebook PC	2609-43J	BA-ZKPLW	IBM	-
C	EVA Board	-	-	ADC Technology	-
D	AC Adapter	02K6547	11S02K6547ZJ16B703M0M6	IBM	-
E	DC Power Supply (prepared by UL Apex)	PAN35-10A	DE001677	Kikusui	- (Control No.: KDC-01)

List of cables used

No.	Name	Length (m)	Shield	Backshell material	Remark
1	D-Sub cable	1.5	Shielded	Polyvinyl chloride	-
2	DC cable	1.5	Unshielded	Polyvinyl chloride	-
3	AC cable	1.0	Unshielded	Polyvinyl chloride	-
4	DC cable	1.7	Unshielded	Polyvinyl chloride	-
5	AC cable	1.5	Unshielded	Polyvinyl chloride	-

5 Carrier Frequency Separation

Test Procedure
The carrier frequency separation was measured with a spectrum analyzer connected to the antenna port.

Summary of the test results:	Pass	Test data:	APPENDIX 2 Page 14
Date:	March 7, 2005	Test engineer :	Toyokazu Imamura

6 20dB Bandwidth

Test Procedure
The bandwidth was measured with a spectrum analyzer connected to the antenna port.

Summary of the test results:	Pass	Test data:	APPENDIX 2 Page 15
Date:	March 7, 2005	Test engineer :	Toyokazu Imamura

7 Number of Hopping Frequency

Test Procedure
The Number of Hopping Frequency was measured with a spectrum analyzer connected to the antenna port.

Summary of the test results:	Pass	Test data:	APPENDIX 2 Page 16 to18
Date:	March 7, 2005	Test engineer :	Toyokazu Imamura

8 Dwell time

Test Procedure
The Dwell time was measured with a spectrum analyzer connected to the antenna port.

Summary of the test results:	Pass	Test data:	APPENDIX 2 Page 19 to 24
Date:	March 7, 2005	Test engineer :	Toyokazu Imamura

9 Maximum Peak Output Power

Test Procedure
The Maximum Peak Output Power was measured with a spectrum analyzer connected to the antenna port.
(RBW/VBW: 1MHz/3MHz)

Summary of the test results:	Pass	Test data:	APPENDIX 2 Page 25 to 27
Date:	March 7, 2005	Test engineer :	Toyokazu Imamura

10 Out of Band Emissions (Antenna Port Conducted)

Test Procedure
The Out of Band Emissions was measured with a spectrum analyzer connected to the antenna port.

Summary of the test results:	Pass	Test data:	APPENDIX 2 Page 28 to 33
Date:	March 7, 2005	Test engineer :	Toyokazu Imamura

11 Out of Band Emissions (Radiated)

11.1 Operating environment

The test was carried out in an open site.

11.2 Test configuration

EUT was placed on a platform of nominal size, 0.5m by 0.5m, raised 80cm above the conducting ground plane.
A drawing of the set up is shown in the photos of Appendix 1.

11.3 Test conditions

Frequency range : 30MHz - 26GHz
Test distance : 3m
EUT operation mode : Transmitting

11.4 Test procedure

The Radiated Electric Field Strength intensity has been measured with a ground plane and at a distance of 3m.
The measuring antenna height was varied between 1 and 4m and EUT was rotated a full revolution in order to obtain the maximum value of the electric field intensity.
The measurements were performed for both vertical and horizontal antenna polarization.

In any 100kHz bandwidth outside the frequency band in which the spread spectrum intentional radiator is operating, the radio frequency power that is produced by the intentional radiator confirmed 20dB below that in the 100kHz bandwidth within the band that contains the highest level of the desired power, based on a radiated measurement.

Measurements were performed with QP, PK, and AV detector.
The radiated emission measurements were made with the following detector function of the test receiver.

Frequency	Below 1GHz	Above 1GHz
Instrument used	Test Receiver	Spectrum Analyzer
Detector IF Bandwidth	QP: BW 120kHz	PK: RBW: 1MHz/VBW: 1MHz AV: RBW: 1MHz/VBW: 10Hz

The equipment was previously checked at each position of three axes X, Y and Z. The position in which the maximum noise occurred was chosen to put into measurement. See the table below and photographs in page 12-13.
With the position, the noise levels of all the frequencies were measured.

Frequency	Below 1GHz	Above 1GHz
Antenna: Horizontal	X	Z
Antenna: Vertical	X	Y

11.5 Results

Summary of the test results : Pass
Test data : APPENDIX 2 Page 34 to 36 (30 - 1000MHz)
: APPENDIX 2 Page 36 to 42 (1 - 26GHz)
: APPENDIX 2 Page 43 to 46 (Band Edges: 2390MHz/ 2483.5MHz, Restricted band Charts)

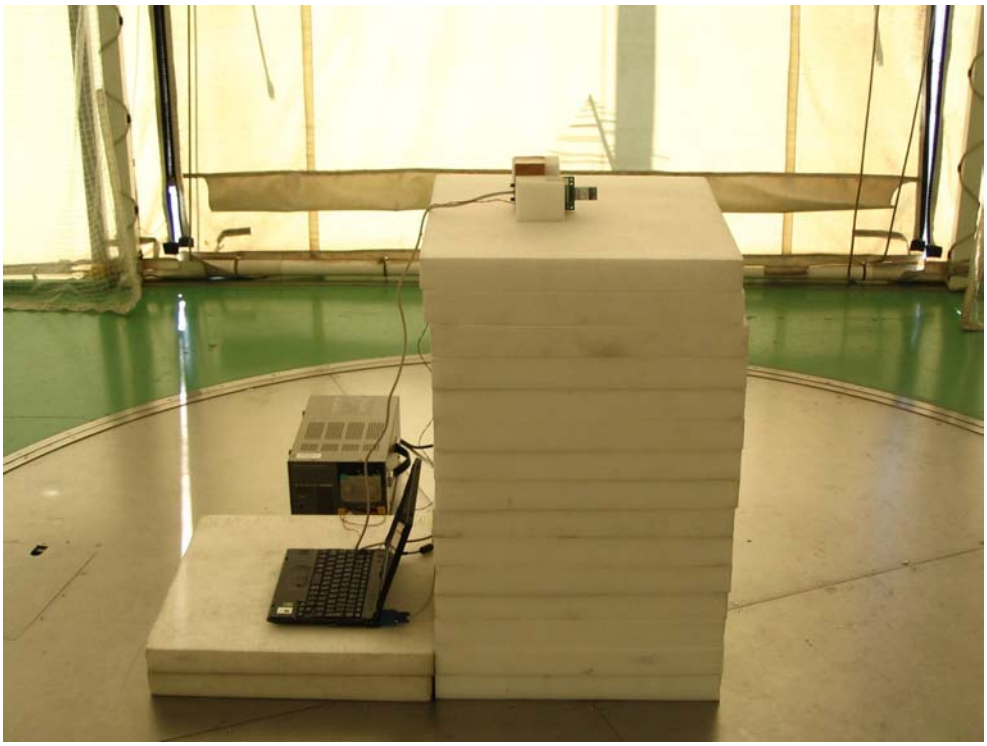
Date : February 3 and 21, 2005 Test engineer : Ichiro Isozaki and Toyokazu Imamura

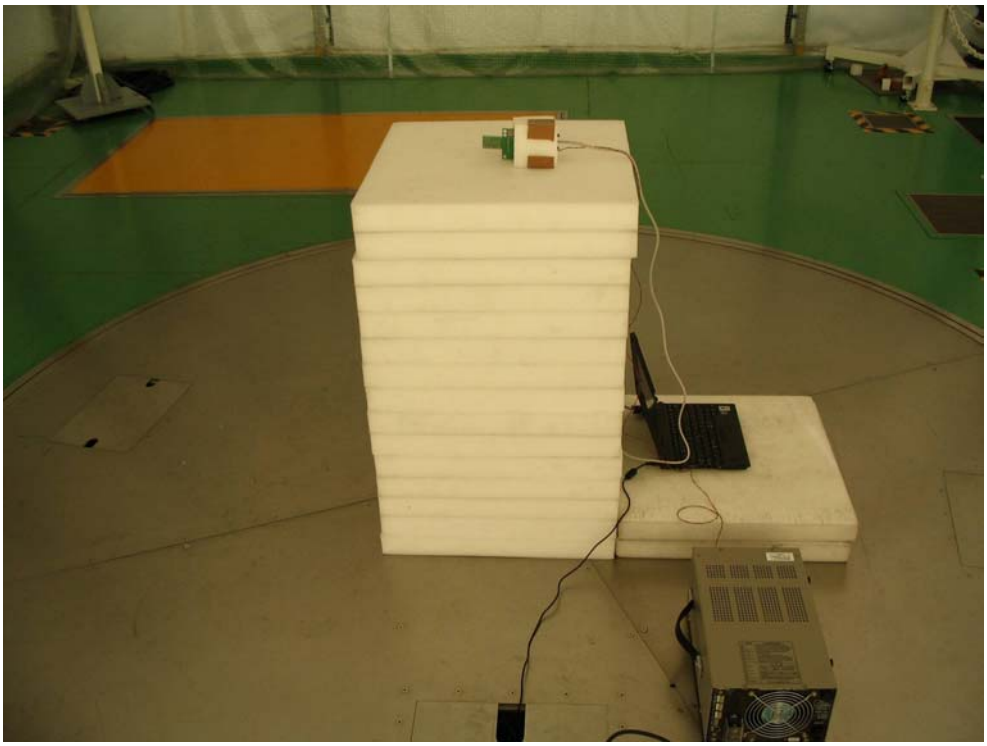
APPENDIX 1: Photographs of test setup

APPENDIX 2: Test Data

APPENDIX 3: Test instruments

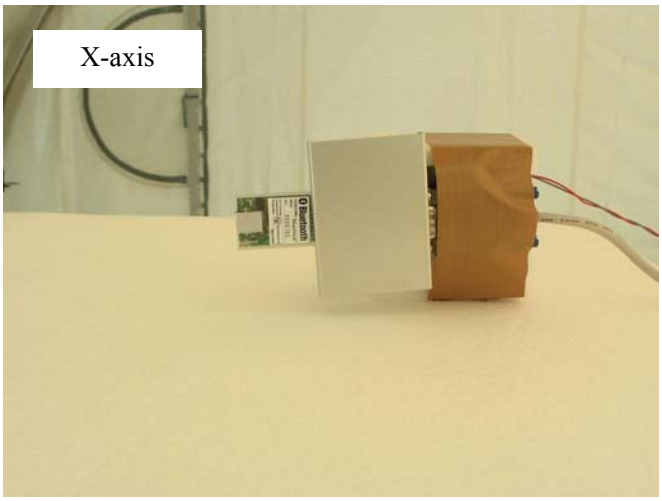
Radiated emission



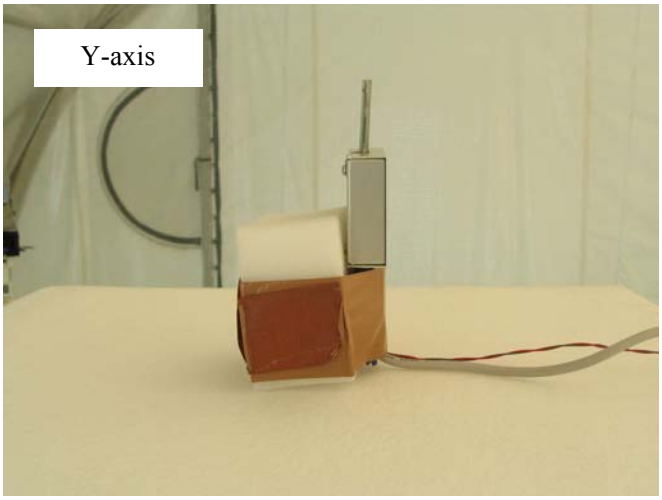


Pre check of worse-case position

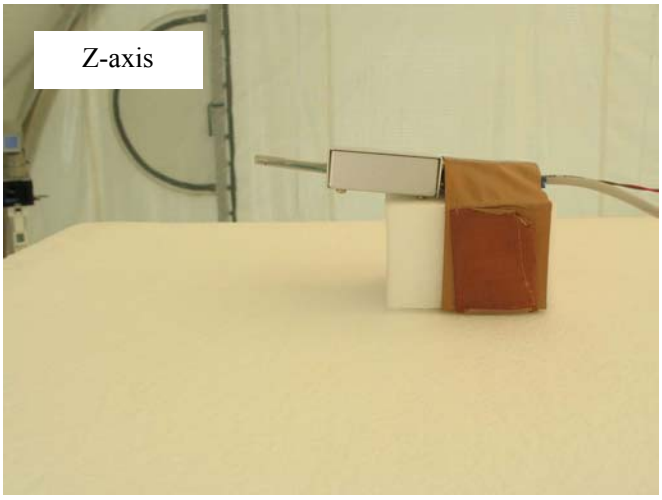
X-axis



Y-axis



Z-axis

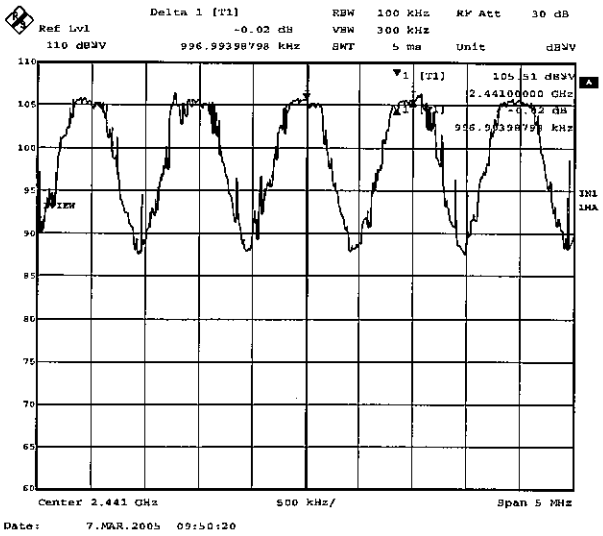


Channel Separation: FCC 15.247(a)(1)

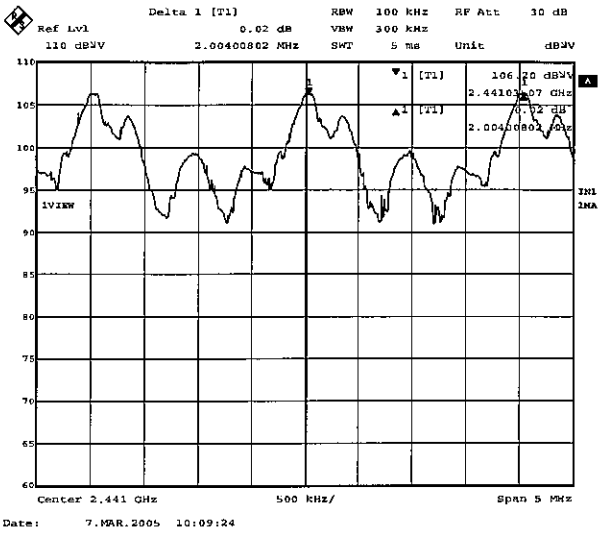
UL Apex Co.,Ltd. Yamakita No.4 Shielded Room

COMPANY	: SOKKIA CO.,LTD.	REPORT NO	: 25FE0137-YK-1
EQUIPMENT	: Blue Stick	REGULATION	: Fcc Part15SubpartC 247(a)(1)
MODEL NUMBER	: BS01	DATE	: 2005/3/7
SERIAL NUMBER	: 0000792	TEMP./HUMI	: 22℃/42%
FCC ID	: S6MBS01	TEST MODE	: Transmitting
POWER	: DC3V	ENGINEER	: Toyokazu Imamura

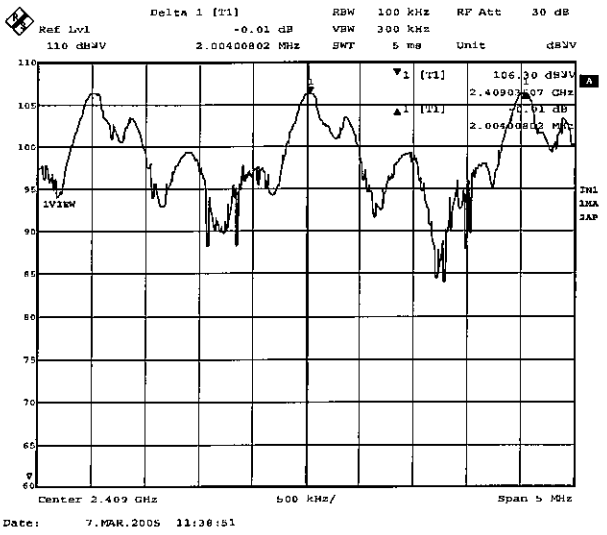
1. Hopping:996.99kHz



2. Inquiry:2004.01kHz



3. Page:2004.01kHz

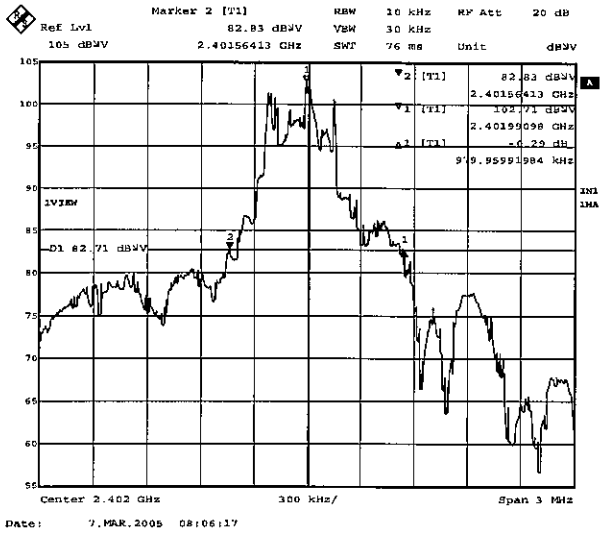


20dB Bandwidth: FCC 15.247(a)(1)

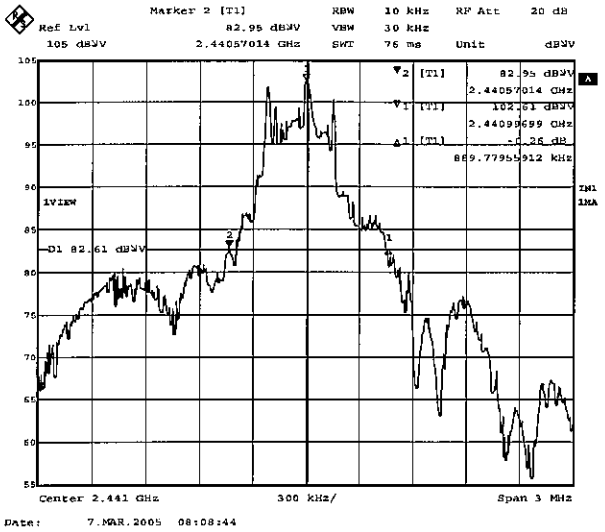
UL Apex Co.,Ltd. Yamakita No.4 Shielded Room

COMPANY	: SOKKIA CO.,LTD.	REPORT NO	: 25FE0137-YK-1
EQUIPMENT	: Blue Stick	REGULATION	: Fcc Part15SubpartC 247(a)(1)
MODEL NUMBER	: BS01	DATE	: 2005/3/7
SERIAL NUMBER	: 0000792	TEMP./HUMI	: 22℃/42%
FCC ID	: S6MBS01	TEST MODE	: Transmitting (Hopping off)
POWER	: DC3V	ENGINEER	: Toyokazu Imamura

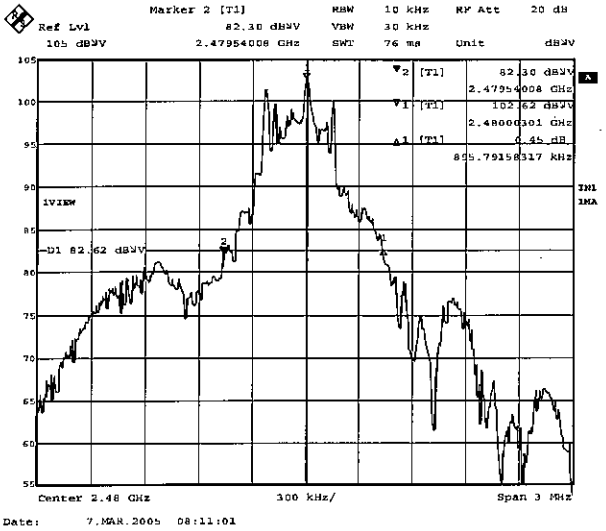
1. ch : 2402MHz/20dB Bandwidth:974.94kHz



2. ch : 2441MHz/20dB Bandwidth:889.78kHz



3. ch : 2480MHz/20dB Bandwidth:893.79kHz



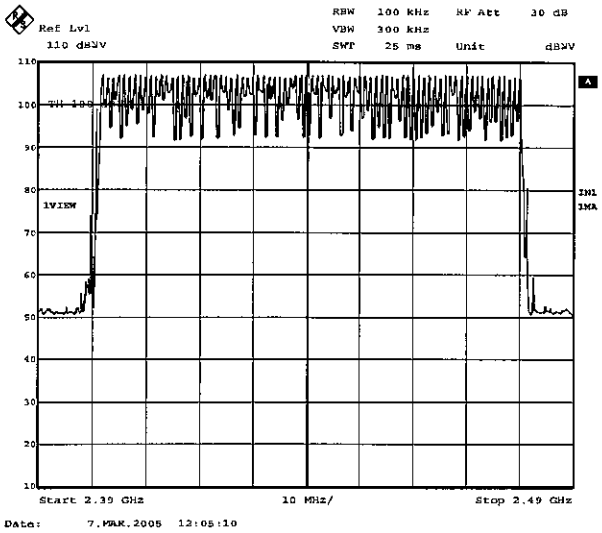
Channel Utilization: FCC 15.247(a)(1)(iii)

UL Apex Co.,Ltd. Yamakita No.4 Shielded Room

COMPANY	: SOKKIA CO.,LTD.	REPORT NO	: 25FE0137-YK-1
EQUIPMENT	: Blue Stick	REGULATION	: Fcc Part15SubpartC 247(a)(1)(iii)
MODEL NUMBER	: BS01	DATE	: 2005/3/7
SERIAL NUMBER	: 0000792	TEMP./HUMI	: 22℃/42%
FCC ID	: S6MBS01	TEST MODE	: Transmitting
POWER	: DC3V	ENGINEER	: Toyokazu Imamura

Hopping: 79ch

1.



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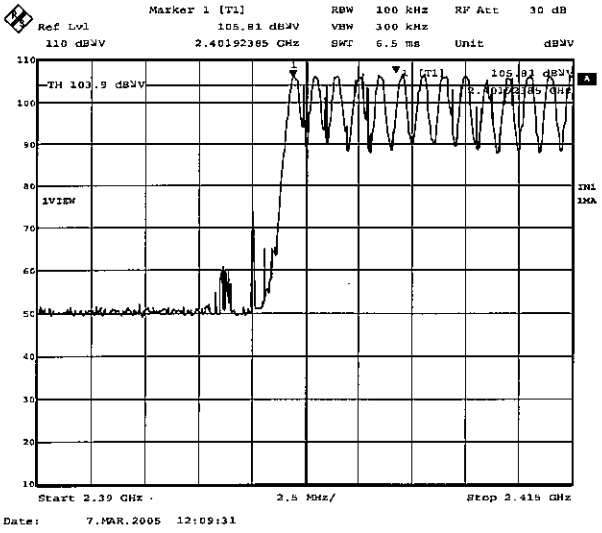

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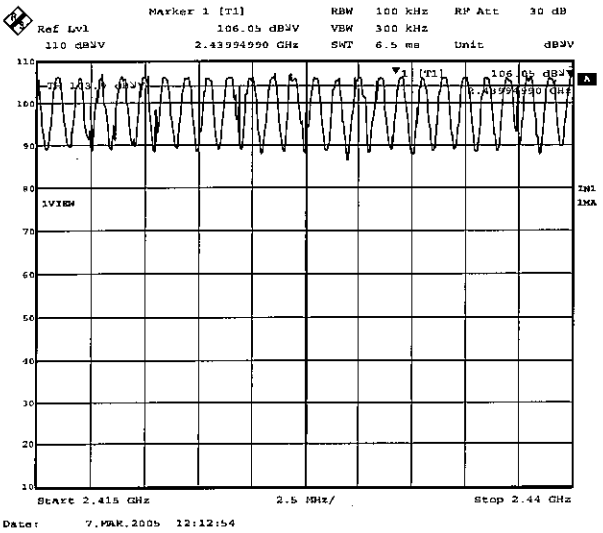
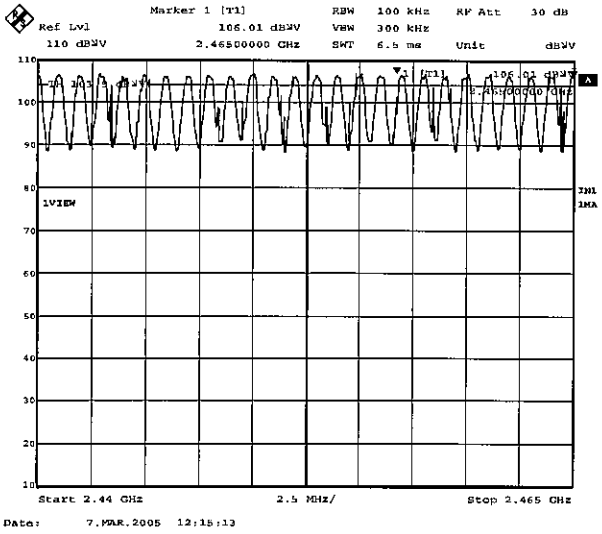


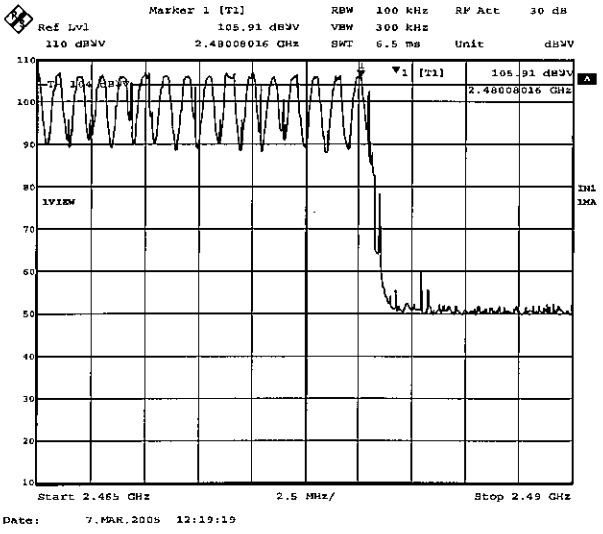
Channel Utilization: FCC 15.247(a)(1)(iii)

UL Apex Co.,Ltd. Yamakita No.4 Shielded Room

COMPANY	: SOKKIA CO.,LTD.	REPORT NO	: 25FE0137-YK-1
EQUIPMENT	: Blue Stick	REGULATION	: Fcc Part15SubpartC 247(a)(1)(iii)
MODEL NUMBER	: BS01	DATE	: 2005/3/7
SERIAL NUMBER	: 0000792	TEMP./HUMI	: 22℃/42%
FCC ID	: S6MBS01	TEST MODE	: Transmitting
POWER	: DC3V	ENGINEER	: Toyokazu Imamura

4.



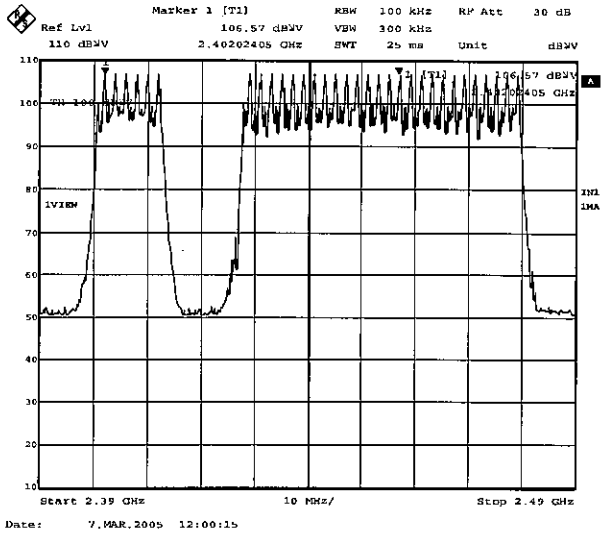


Channel Utilization: FCC 15.247(a)(1)(iii)

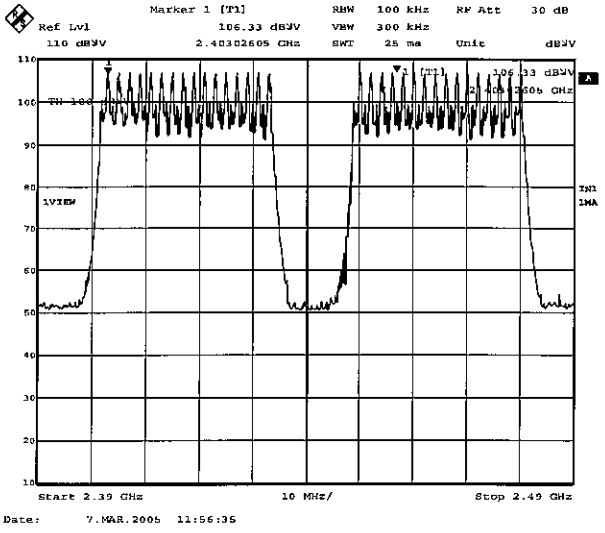
UL Apex Co.,Ltd. Yamakita No.4 Shielded Room

COMPANY	: SOKKIA CO.,LTD.	REPORT NO	: 25FE0137-YK-1
EQUIPMENT	: Blue Stick	REGULATION	: Fcc Part15SubpartC 247(a)(1)(iii)
MODEL NUMBER	: BS01	DATE	: 2005/3/7
SERIAL NUMBER	: 0000792	TEMP./HUMI	: 22℃/42%
FCC ID	: S6MBS01	TEST MODE	: Transmitting
POWER	: DC3V	ENGINEER	: Toyokazu Imamura

2. Inquiry: 32ch



3. Page: 32ch



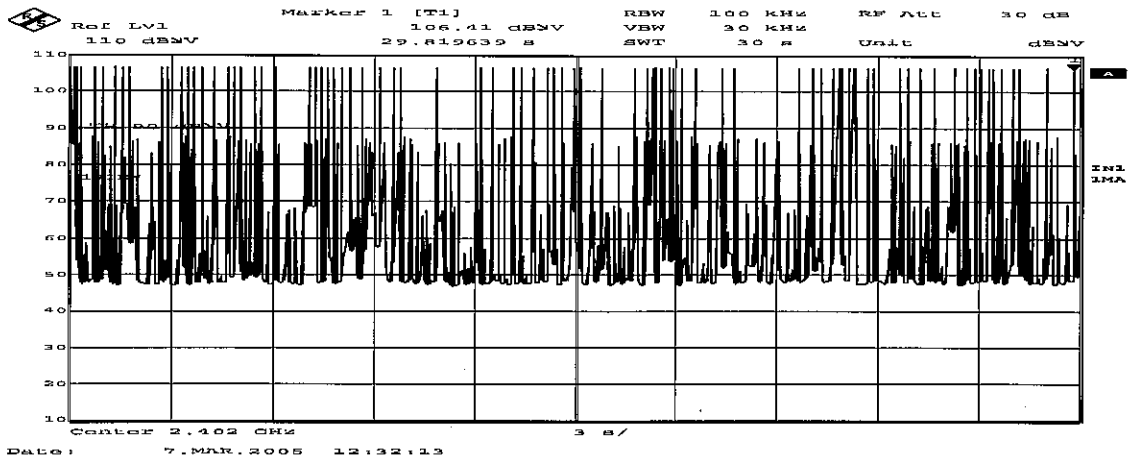
Dwell Time: FCC 15.247(a)(1)(iii)

UL Apex Co.,Ltd. Yamakita No.4 Shielded Room

COMPANY	: SOKKIA CO.,LTD.	REPORT NO	: 25FE0137-YK-1
EQUIPMENT	: Blue Stick	REGULATION	: Fcc Part15SubpartC 247(a)(1)(iii)
MODEL NUMBER	: BS01	DATE	: 2005/3/7
SERIAL NUMBER	: 0000792	TEMP./HUMI	: 22℃/42%
FCC ID	: S6MBS01	TEST MODE	: Transmitting
POWER	: DC3V	ENGINEER	: Toyokazu Imamura

Hopping:

Count 1



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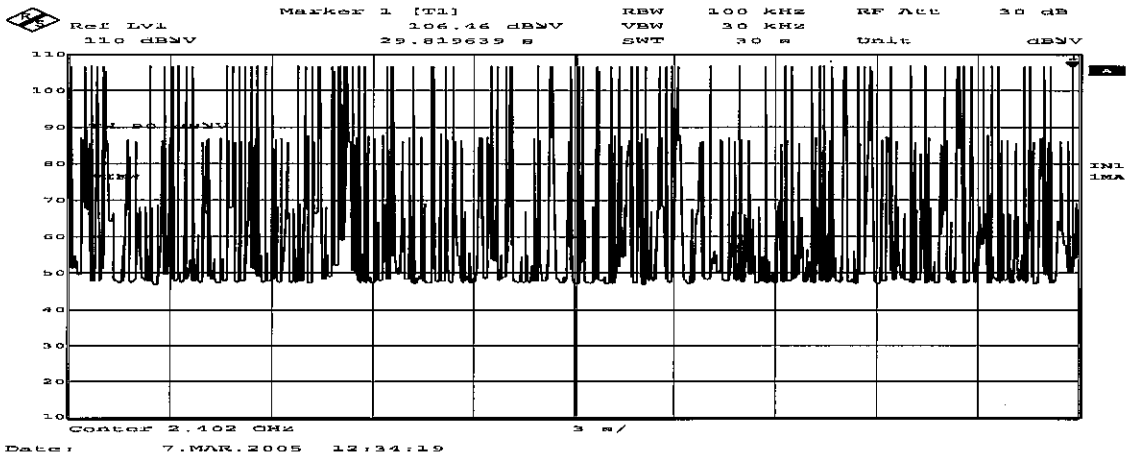

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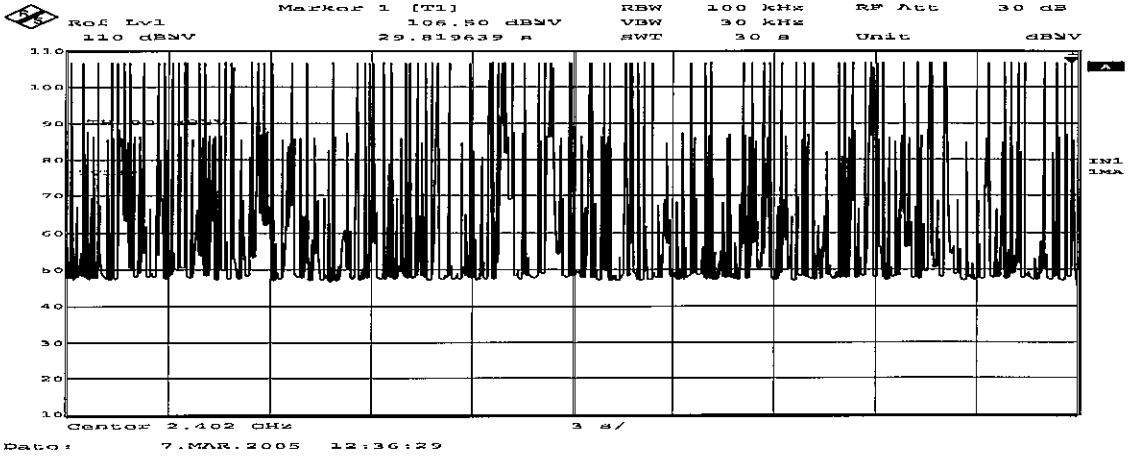
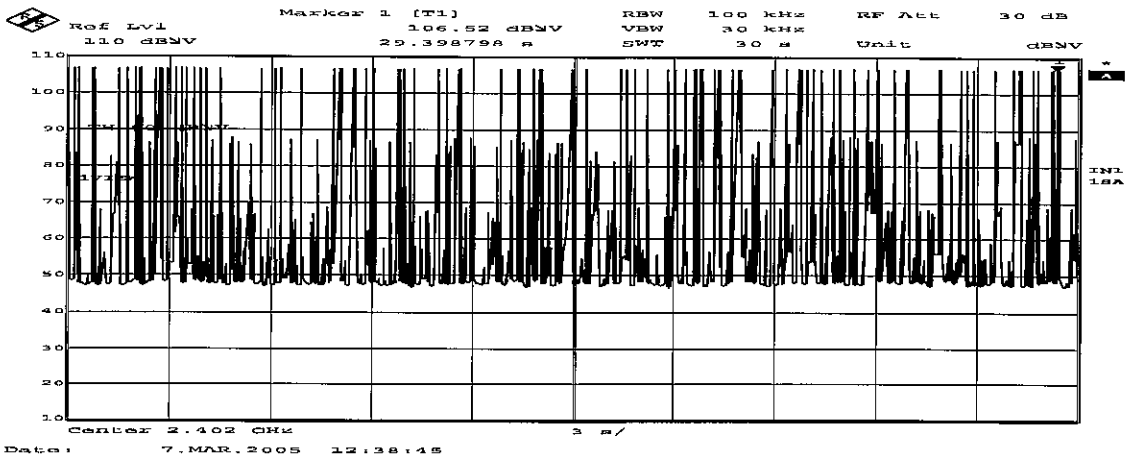


Dwell Time: FCC 15.247(a)(1)(iii)

UL Apex Co.,Ltd. Yamakita No.4 Shielded Room

COMPANY	: SOKKIA CO.,LTD.	REPORT NO	: 25FE0137-YK-1
EQUIPMENT	: Blue Stick	REGULATION	: Fcc Part15SubpartC 247(a)(1)(iii)
MODEL NUMBER	: BS01	DATE	: 2005/3/7
SERIAL NUMBER	: 0000792	TEMP./HUMI	: 22℃/42%
FCC ID	: S6MBS01	TEST MODE	: Transmitting
POWER	: DC3V	ENGINEER	: Toyokazu Imamura

Count 4



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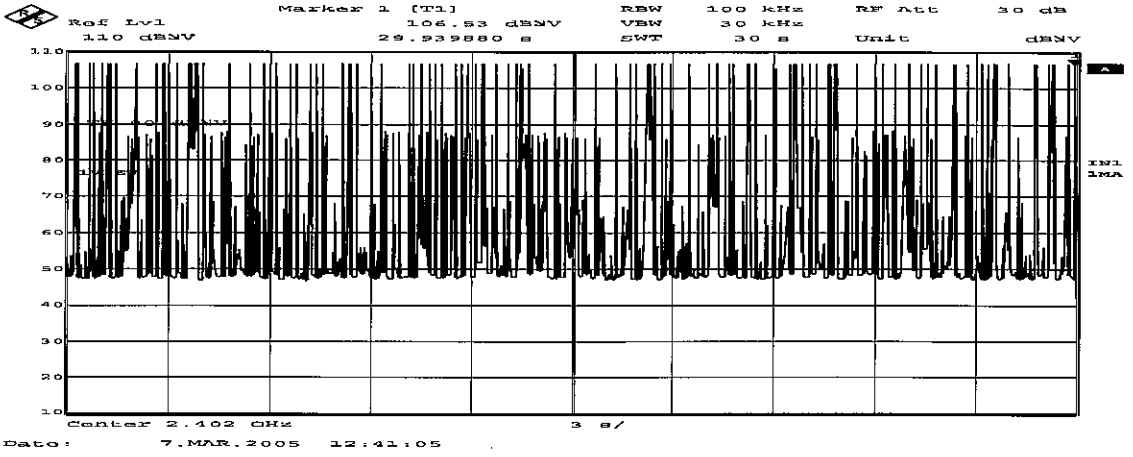
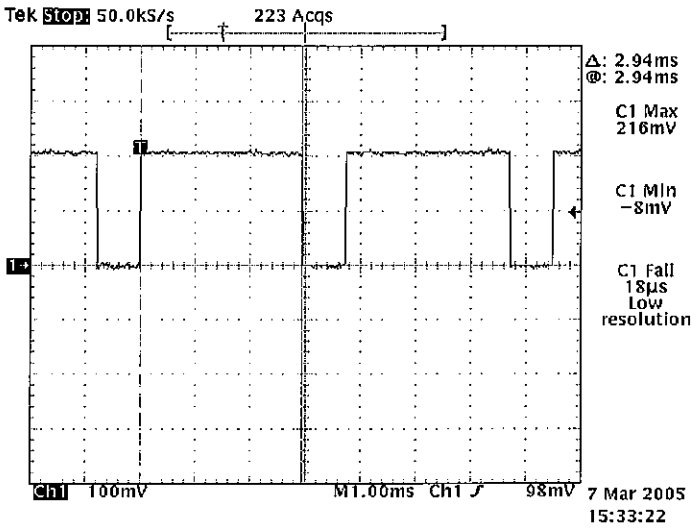


Duty cycle(Hopping)



Dwell time = (Count 1 + Count 2 + Count 3 + Count 4 + Count5) / 5 * Ton
= (78 + 82 + 87 + 76 + 88) / 5 * 2.94[ms]
= 241.67 [ms]

Dwell Time: FCC 15.247(a)(1)(iii)

UL Apex Co.,Ltd. Yamakita No.4 Shielded Room

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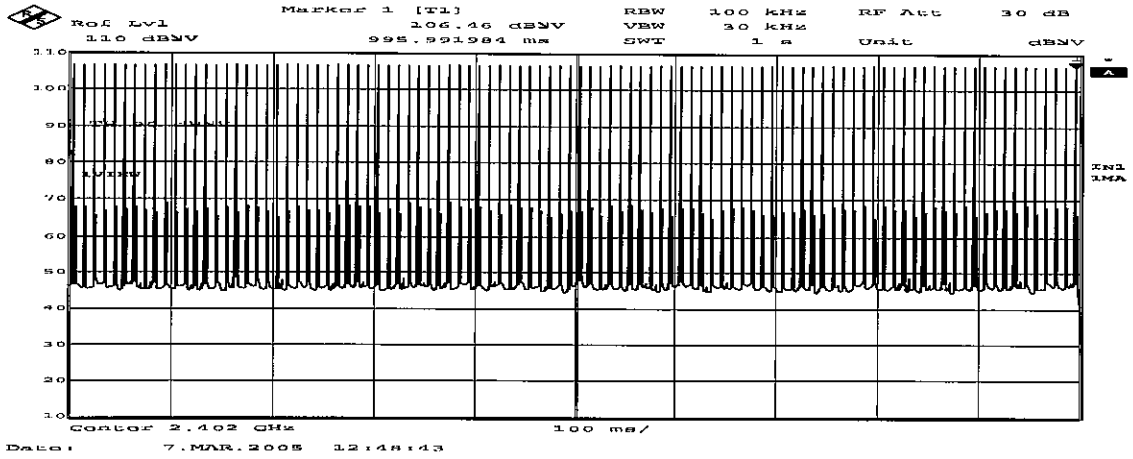
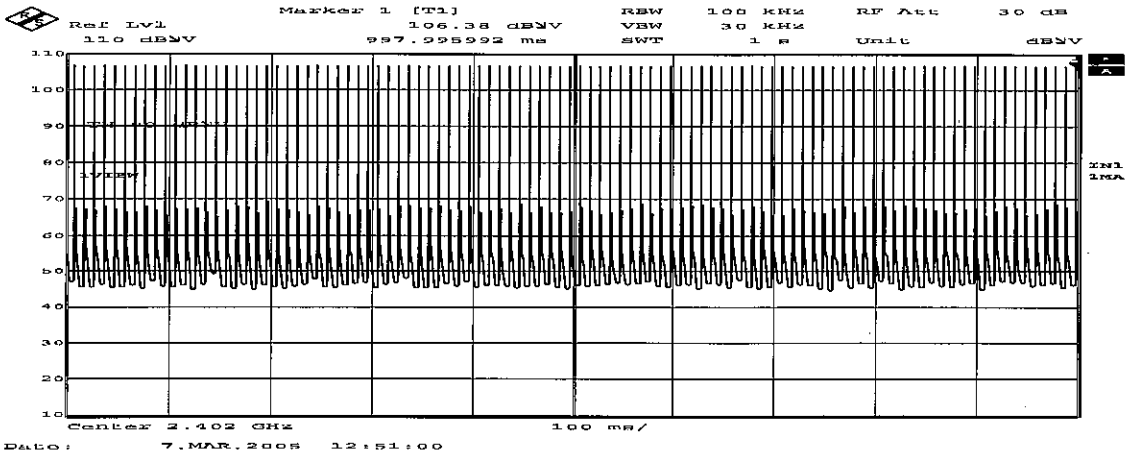
EQUIPMENT	: Blue Stick	REGULATION	: Fcc Part15SubpartC 247(a)(1)(iii)
MODEL NUMBER	: BS01	DATE	: 2005/3/7
SERIAL NUMBER	: 0000792	TEMP./HUMI	: 22℃/42%
FCC ID	: S6MBS01	TEST MODE	: Transmitting
POWER	: DC3V	ENGINEER	: Toyokazu Imamura

Inquiry:

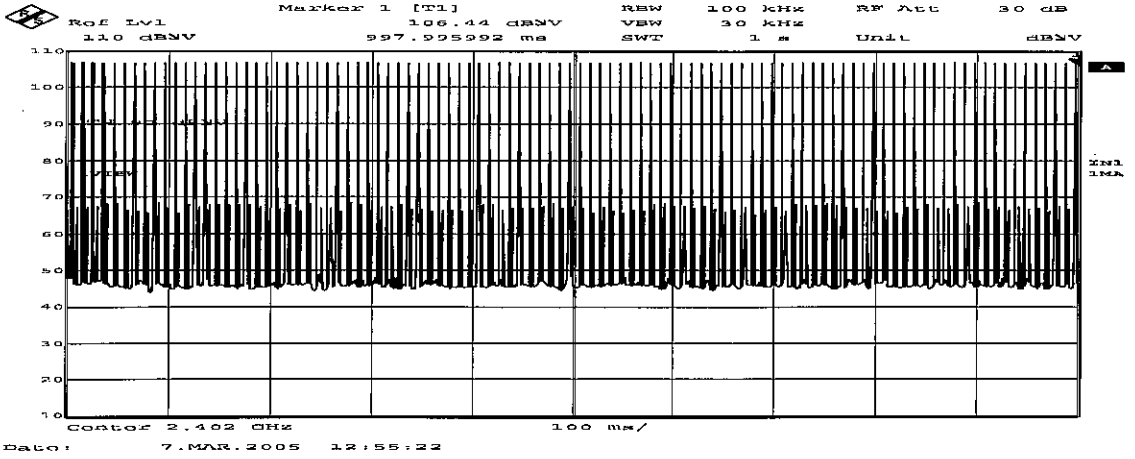
Count 1



Count 2



Count 3

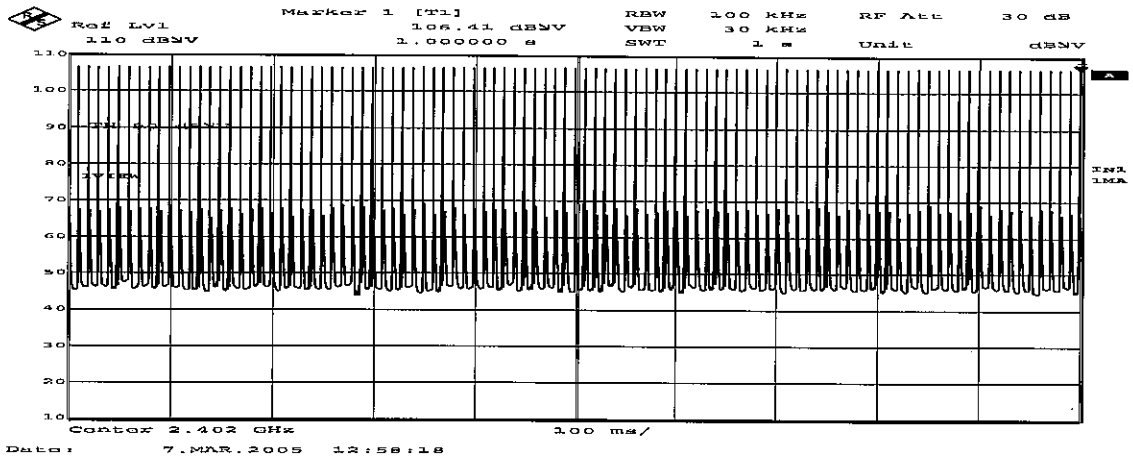


Dwell Time: FCC 15.247(a)(1)(iii)

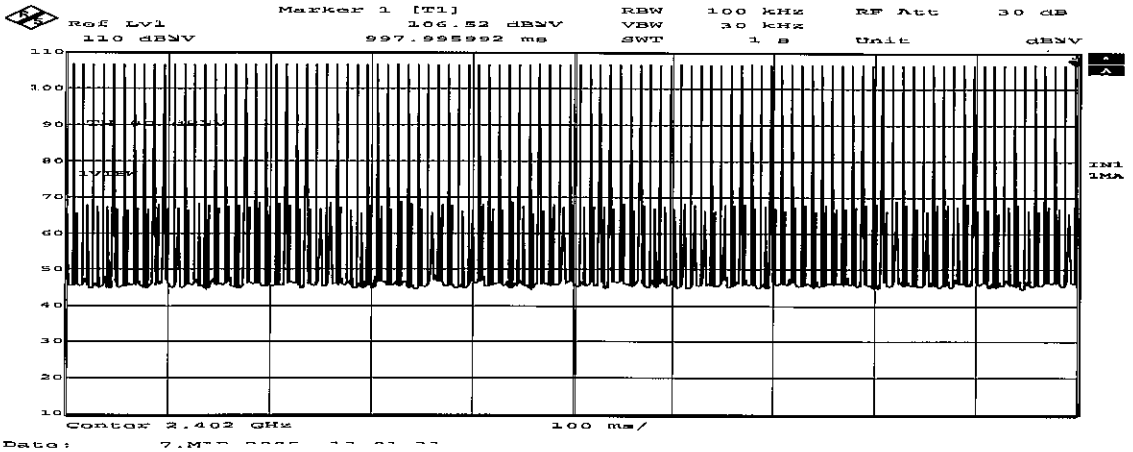
UL Apex Co.,Ltd. Yamakita No.4 Shielded Room

COMPANY	: SOKKIA CO.,LTD.	REPORT NO	: 25FE0137-YK-1
EQUIPMENT	: Blue Stick	REGULATION	: Fcc Part15SubpartC 247(a)(1)(iii)
MODEL NUMBER	: BS01	DATE	: 2005/3/7
SERIAL NUMBER	: 0000792	TEMP./HUMI	: 22℃/42%
FCC ID	: S6MBS01	TEST MODE	: Transmitting
POWER	: DC3V	ENGINEER	: Toyokazu Imamura

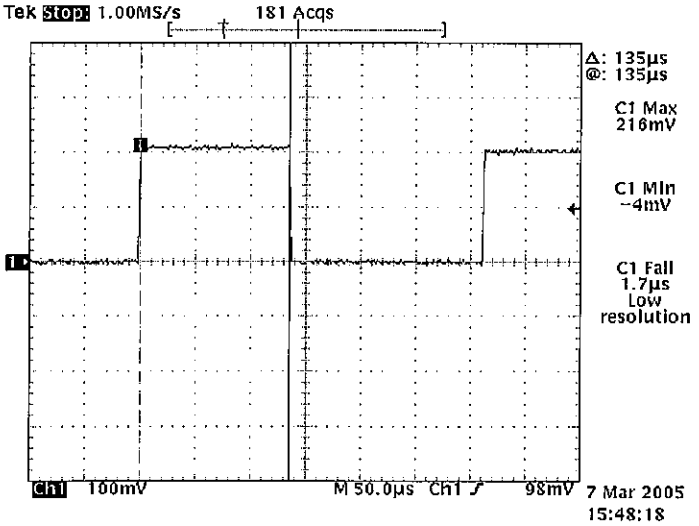
Count 4



Count 5



Duty cycle(Inquiry)



Dwell time = (Count 1 + Count 2 + Count 3 + Count 4 + Count5) / 5 * 0.4x * Ton
= (100 + 100 + 100 + 100 + 100) / 5 * 12.8[s] * 135 [□s]
= 172.8 [ms]

Note.0.4x = 0.4 * 32ch = 12.8[s]

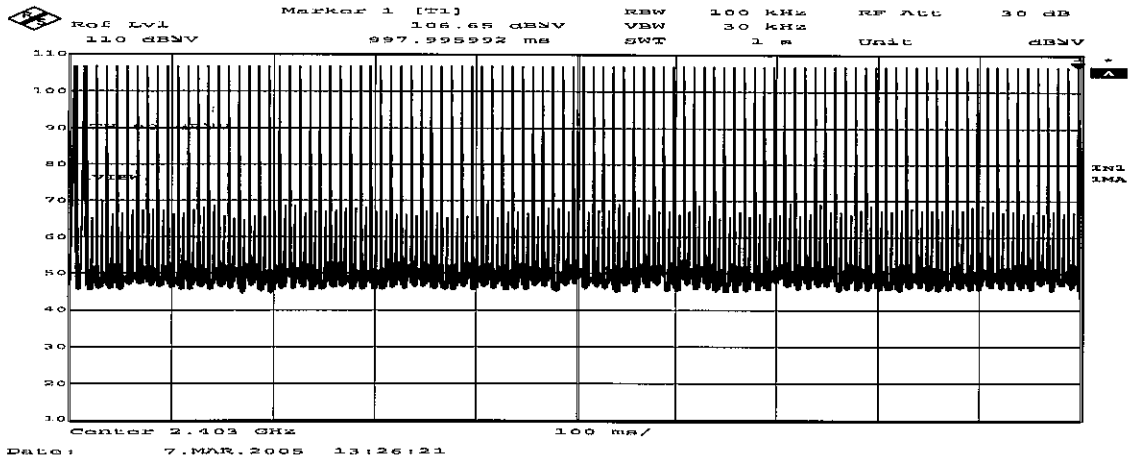
Dwell Time: FCC 15.247(a)(1)(iii)

UL Apex Co.,Ltd. Yamakita No.4 Shielded Room

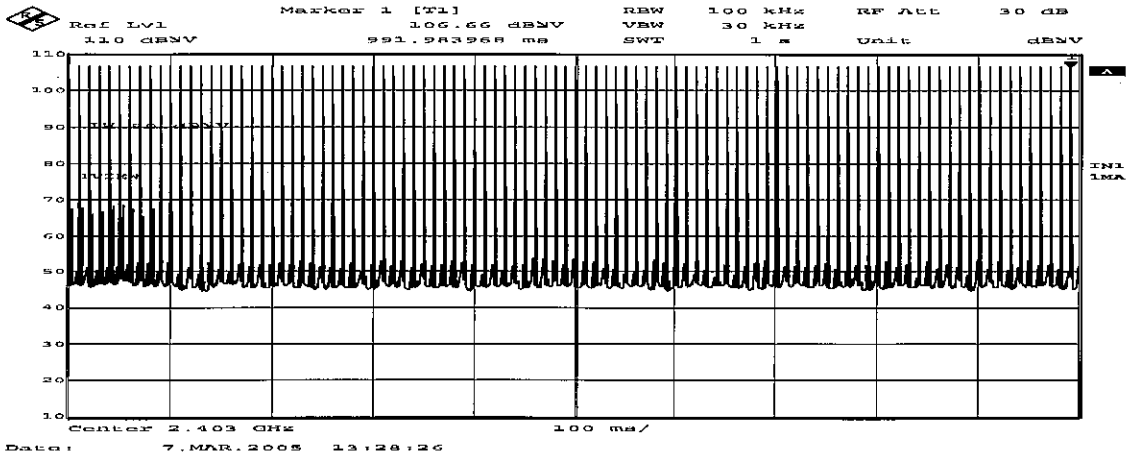
COMPANY	: SOKKIA CO.,LTD.	REPORT NO	: 25FE0137-YK-1
EQUIPMENT	: Blue Stick	REGULATION	: Fcc Part15SubpartC 247(a)(1)(iii)
MODEL NUMBER	: BS01	DATE	: 2005/3/7
SERIAL NUMBER	: 0000792	TEMP./HUMI	: 22℃/42%
FCC ID	: S6MBS01	TEST MODE	: Transmitting
POWER	: DC3V	ENGINEER	: Toyokazu Imamura

Page:

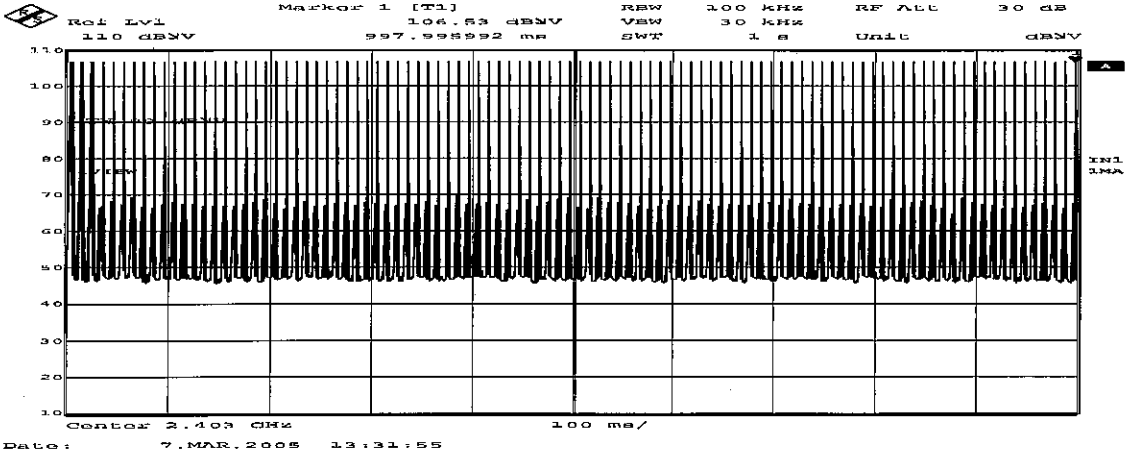
Count 1



Count 2



Count 3

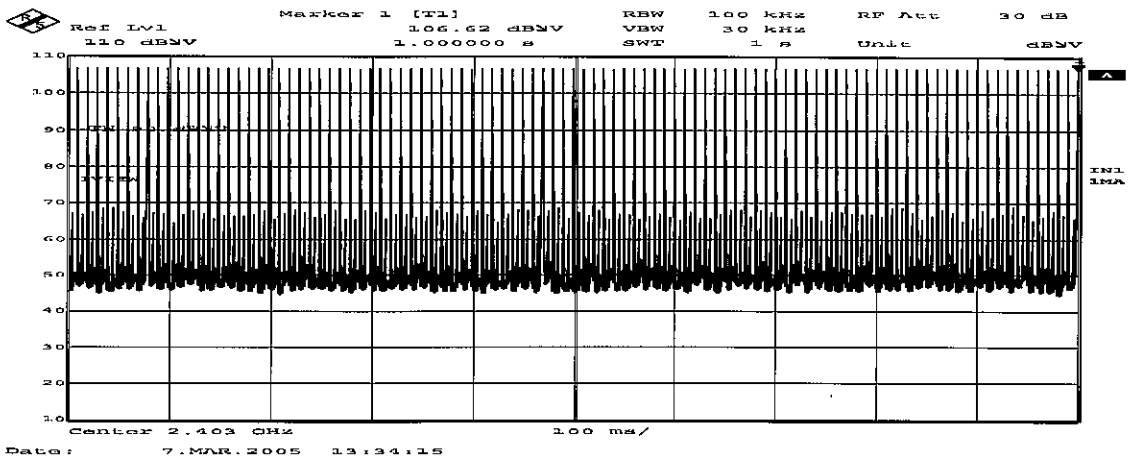


Dwell Time: FCC 15.247(a)(1)(iii)

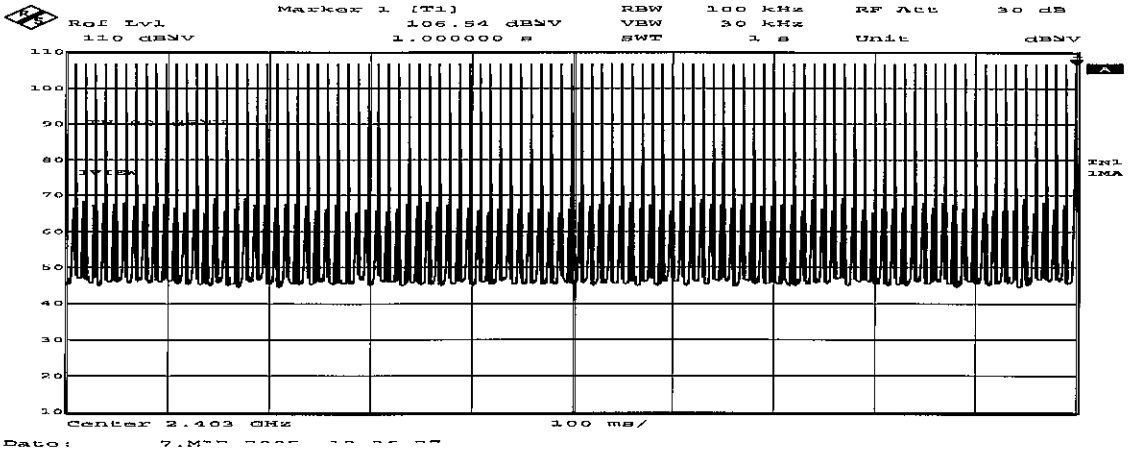
UL Apex Co.,Ltd. Yamakita No.4 Shielded Room

COMPANY	: SOKKIA CO.,LTD.	REPORT NO	: 25FE0137-YK-1
EQUIPMENT	: Blue Stick	REGULATION	: Fcc Part15SubpartC 247(a)(1)(iii)
MODEL NUMBER	: BS01	DATE	: 2005/3/7
SERIAL NUMBER	: 0000792	TEMP./HUMI	: 22°C/42%
FCC ID	: S6MBS01	TEST MODE	: Transmitting
POWER	: DC3V	ENGINEER	: Toyokazu Imamura

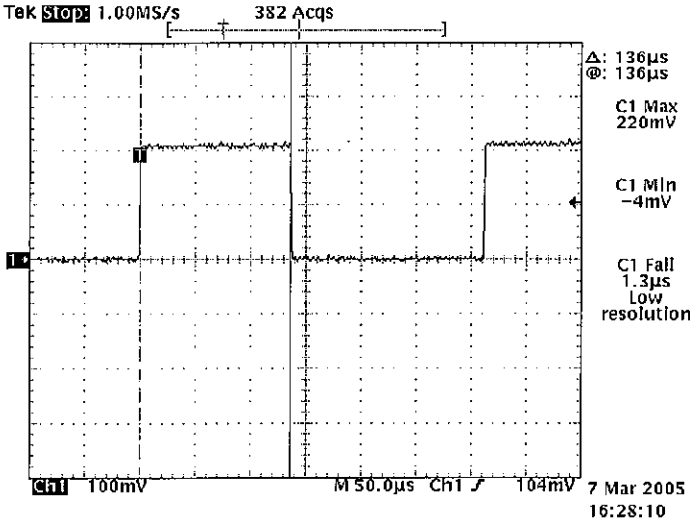
Count 4



Count 5



Duty cycle(Page)



Dwell time = (Count 1 + Count 2 + Count 3 + Count 4 + Count5) / 5 * 0.4x * Ton
= (100 + 100 + 100 + 100 + 100) / 5 * 12.8[s] * 136 [□s]
= 174.08 [ms]

Note.0.4x = 0.4 * 32ch = 12.8[s]

Maximum Peak Conducted Output Power

UL Apex Co.,Ltd
YAMAKITA NO.4 Shielded Room

COMPANY : SOKKIA CO.,LTD.
EQUIPMENT : Blue Stick
MODEL NUMBE : BS01
SERIAL NUMBE : 0000792
FCC ID : S6MBS01
POWER : DC3V
TEST MODE : Transmitting

REPORT NO : 25FE0137-YK-1
REGULATION : Fcc Part15SubpartC 247(b)(1)
DATE : 2005/3/7
TEMP./HUMI : 22℃/42%

ENGINEER : Toyokazu Imamura

CH	FREQ [GHz]	S/A Reading [dBm]	Cable Loss [dB]	Results [dBm]	Limit (1W) [dBm]	MARGIN [dB]
Low	2402.00	-0.60	0.99	0.39	30.0	29.61
Mid	2441.00	-0.60	0.99	0.39	30.0	29.61
High	2480.00	-0.74	0.99	0.25	30.0	29.75
Inquiry	-	-0.60	0.99	0.39	30.0	29.61
page	-	-0.46	0.99	0.53	30.0	29.47
Hopping	-	-0.66	0.99	0.33	20.96	20.63

Limit:1W=30dBm
Limit(Hopping):125mW=20.96dBm
S/A:Spectrum Analyzer

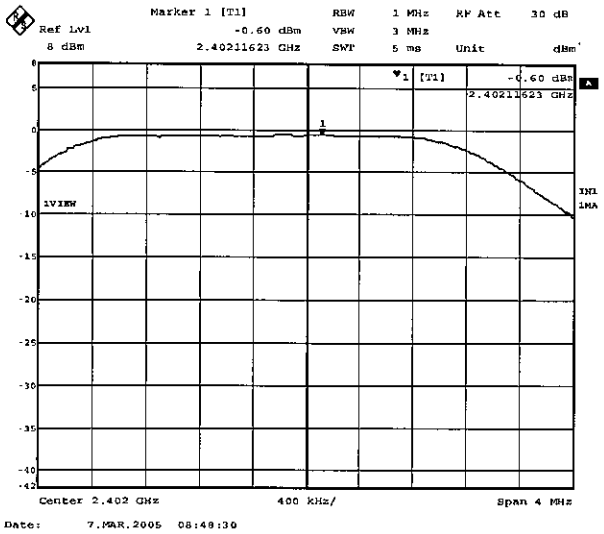
Maximum Peak Conducted Output Power: FCC 15.247(b)(1)

UL Apex Co.,Ltd. Yamakita No.4 Shielded Room

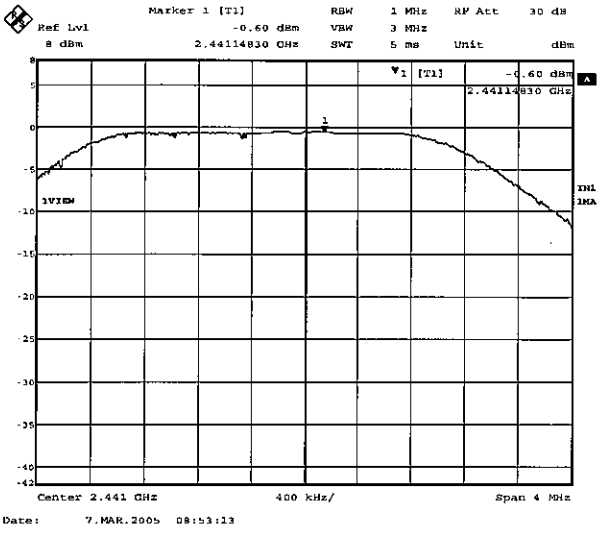
COMPANY	: SOKKIA CO.,LTD.	REPORT NO	: 25FE0137-YK-1
EQUIPMENT	: Blue Stick	REGULATION	: Fcc Part15SubpartC 247(b)(1)
MODEL NUMBER	: BS01	DATE	: 2005/3/7
SERIAL NUMBER	: 0000792	TEMP./HUMI	: 22℃/42%
FCC ID	: S6MBS01	TEST MODE	: Transmitting
POWER	: DC3V	ENGINEER	: Toyokazu Imamura

[Spectrum Analyzer data]

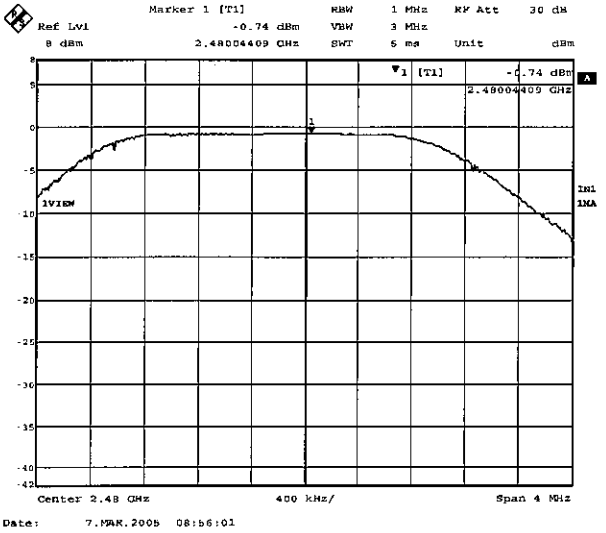
1. ch : 2402MHz



2. ch : 2441MHz



3. ch : 2480MHz

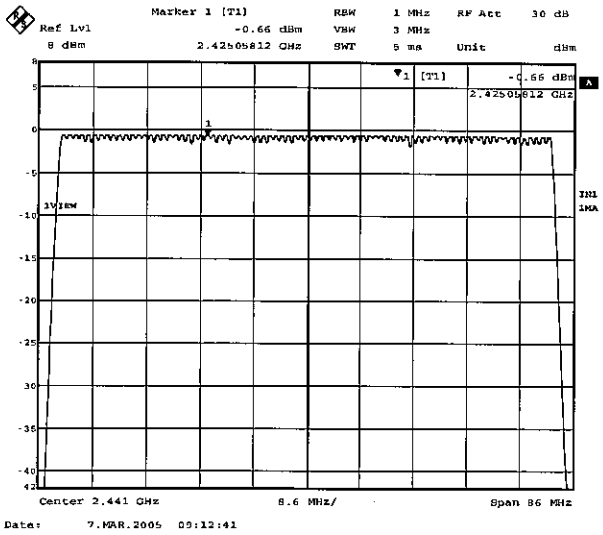


Maximum Peak Conducted Output Power: FCC 15.247(b)(1)

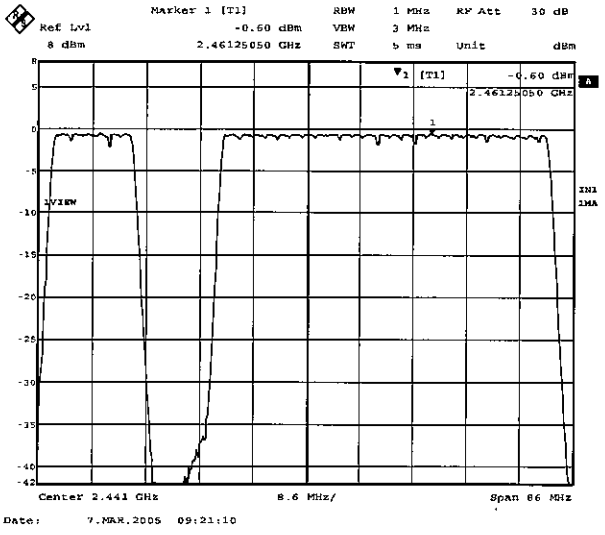
UL Apex Co.,Ltd. Yamakita No.4 Shielded Room

COMPANY	: SOKKIA CO.,LTD.	REPORT NO	: 25FE0137-YK-1
EQUIPMENT	: Blue Stick	REGULATION	: Fcc Part15SubpartC 247(b)(1)
MODEL NUMBER	: BS01	DATE	: 2005/3/7
SERIAL NUMBER	: 0000792	TEMP./HUMI	: 22℃/42%
FCC ID	: S6MBS01	TEST MODE	: Transmitting
POWER	: DC3V	ENGINEER	: Toyokazu Imamura

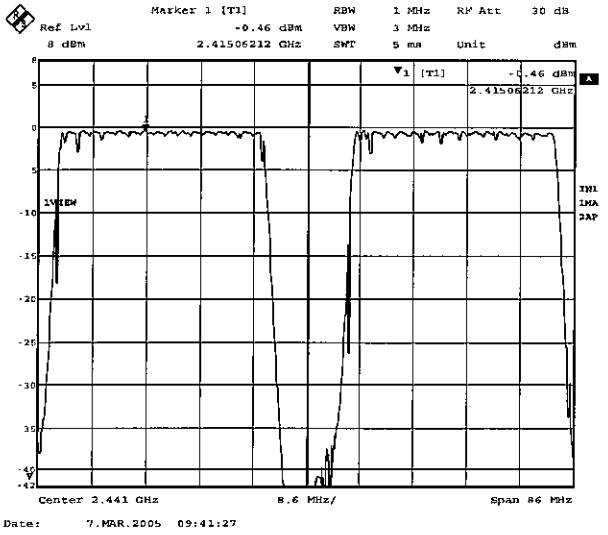
4. Hopping



5. Inquiry



6. Page



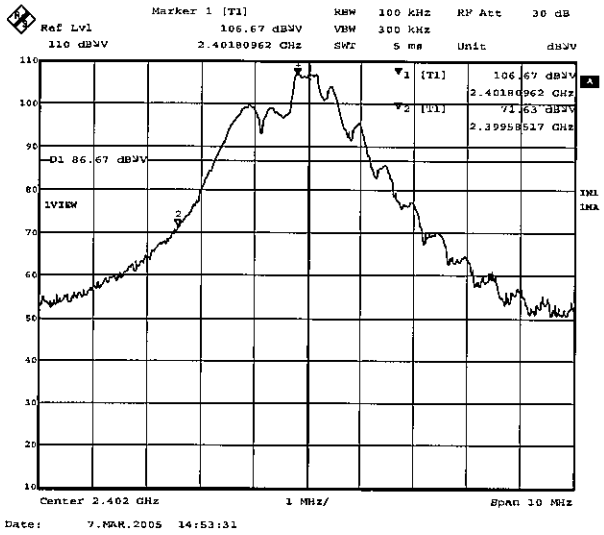
Out of Band Emission(Antenna Terminal Conducted): FCC 15.247(d)

UL Apex Co.,Ltd. Yamakita No.4 Shielded Room

COMPANY	: SOKKIA CO.,LTD.	REPORT NO	: 25FE0137-YK-1
EQUIPMENT	: Blue Stick	REGULATION	: Fcc Part15SubpartC 247(d)
MODEL NUMBER	: BS01	DATE	: 2005/3/7
SERIAL NUMBER	: 0000792	TEMP./HUMI	: 22℃/42%
FCC ID	: S6MBS01	TEST MODE	: Transmitting
POWER	: DC3V	ENGINEER	: Toyokazu Imamura

Ch:2402MHz

1.



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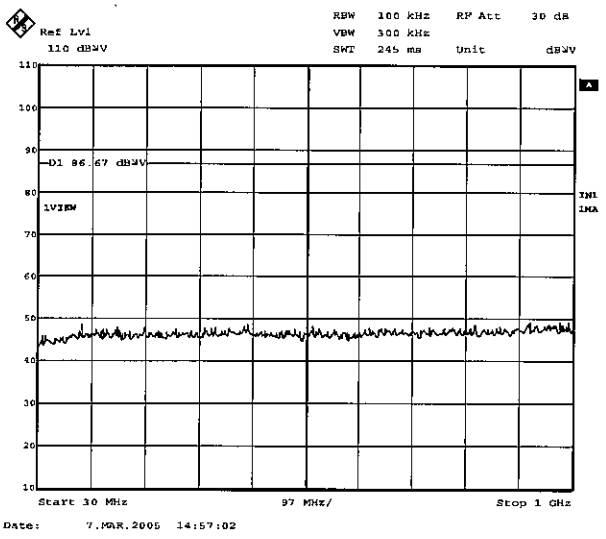

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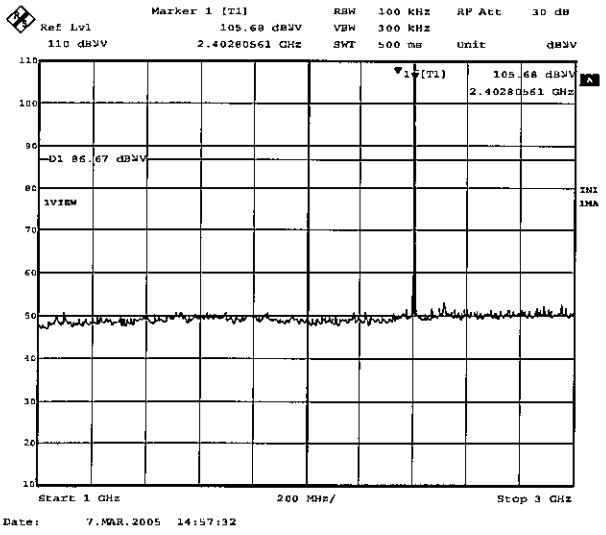


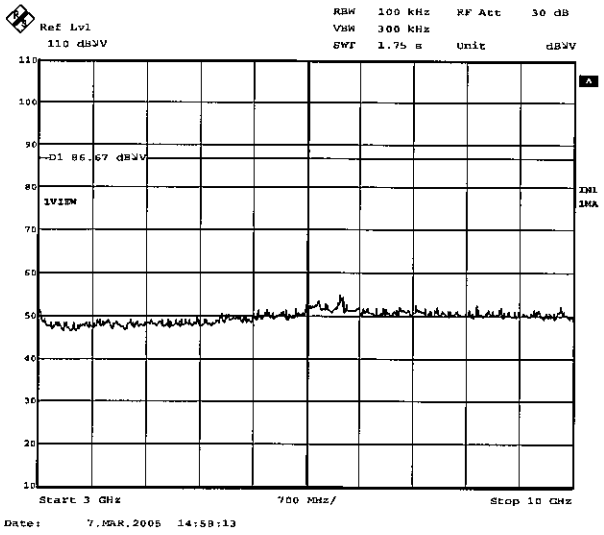
Out of Band Emission(Antenna Terminal Conducted): FCC 15.247(d)

UL Apex Co.,Ltd. Yamakita No.4 Shielded Room

COMPANY	: SOKKIA CO.,LTD.	REPORT NO	: 25FE0137-YK-1
EQUIPMENT	: Blue Stick	REGULATION	: Fcc Part15SubpartC 247(d)
MODEL NUMBER	: BS01	DATE	: 2005/3/7
SERIAL NUMBER	: 0000792	TEMP./HUMI	: 22℃/42%
FCC ID	: S6MBS01	TEST MODE	: Transmitting
POWER	: DC3V	ENGINEER	: Toyokazu Imamura

Ch:2402MHz

4.



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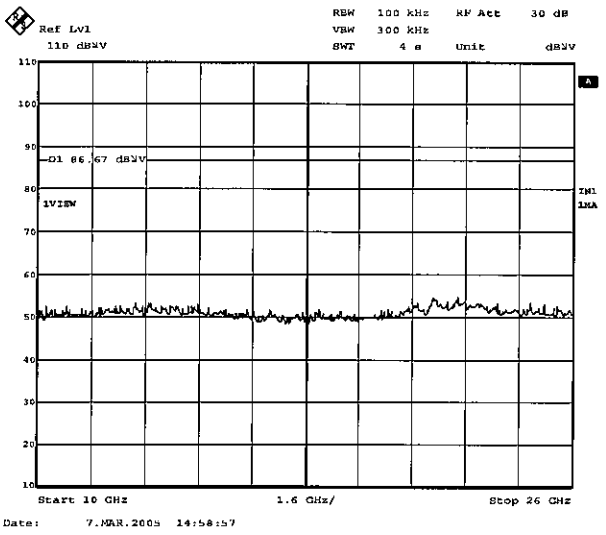


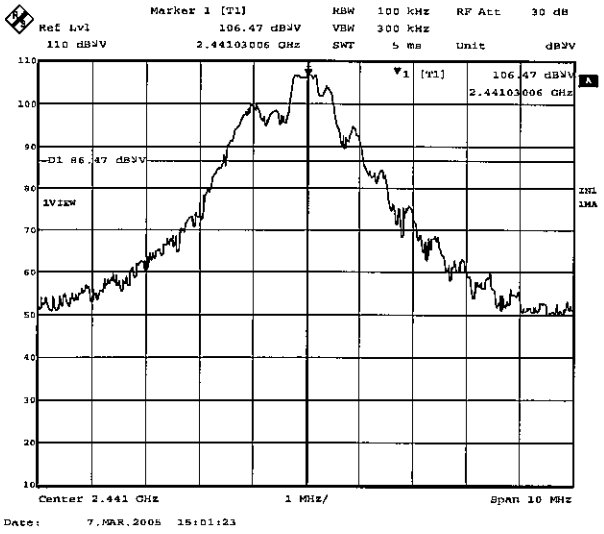
Out of Band Emission(Antenna Terminal Conducted): FCC 15.247(d)

UL Apex Co.,Ltd. Yamakita No.4 Shielded Room

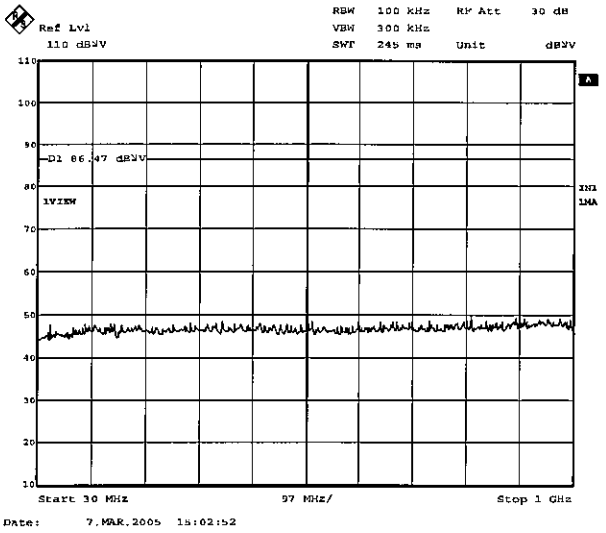
COMPANY	: SOKKIA CO.,LTD.	REPORT NO	: 25FE0137-YK-1
EQUIPMENT	: Blue Stick	REGULATION	: Fcc Part15SubpartC 247(d)
MODEL NUMBER	: BS01	DATE	: 2005/3/7
SERIAL NUMBER	: 0000792	TEMP./HUMI	: 22℃/42%
FCC ID	: S6MBS01	TEST MODE	: Transmitting
POWER	: DC3V	ENGINEER	: Toyokazu Imamura

Ch:2441MHz

1.



2.



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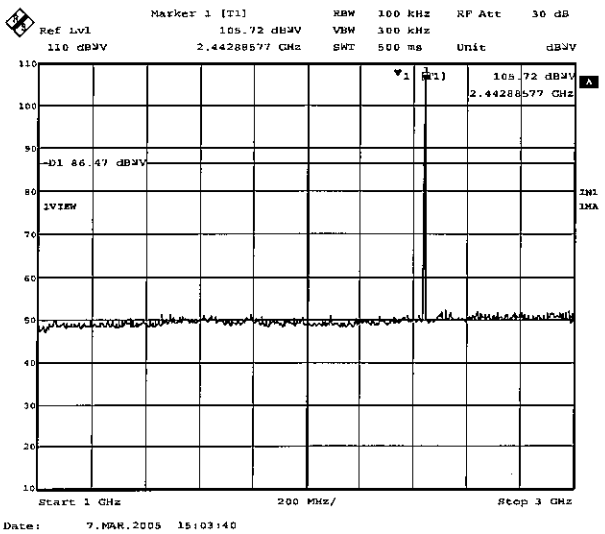
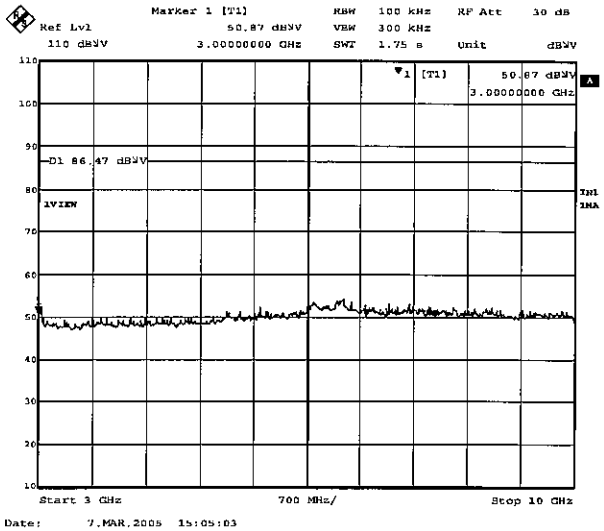


Out of Band Emission(Antenna Terminal Conducted): FCC 15.247(d)

		UL Apex Co.,Ltd. Yamakita No.4 Shielded Room	
COMPANY	: SOKKIA CO.,LTD.	REPORT NO	: 25FE0137-YK-1
EQUIPMENT	: Blue Stick	REGULATION	: Fcc Part15SubpartC 247(d)
MODEL NUMBER	: BS01	DATE	: 2005/3/7
SERIAL NUMBER	: 0000792	TEMP./HUMI	: 22℃/42%
FCC ID	: S6MBS01	TEST MODE	: Transmitting
POWER	: DC3V	ENGINEER	: Toyokazu Imamura

Ch:2441MHz

4.



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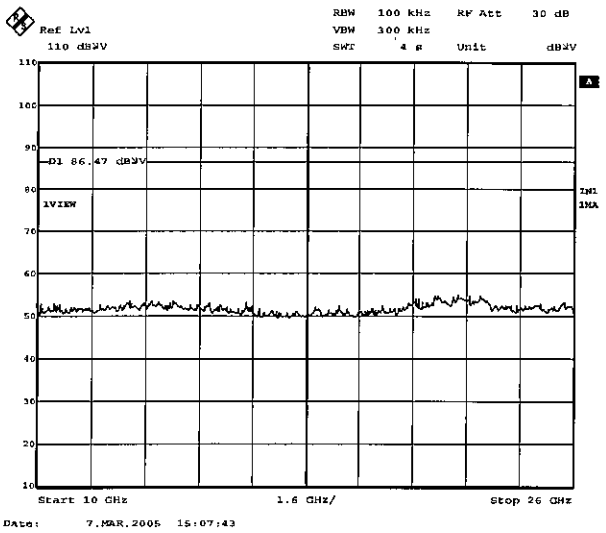


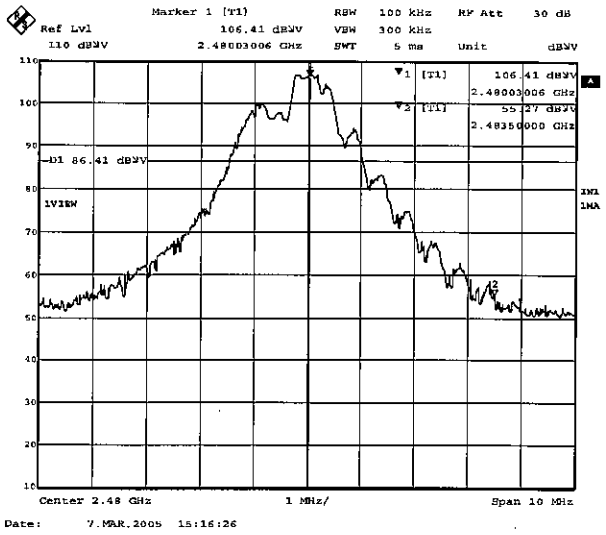
Out of Band Emission(Antenna Terminal Conducted): FCC 15.247(d)

UL Apex Co.,Ltd. Yamakita No.4 Shielded Room

COMPANY	: SOKKIA CO.,LTD.	REPORT NO	: 25FE0137-YK-1
EQUIPMENT	: Blue Stick	REGULATION	: Fcc Part15SubpartC 247(d)
MODEL NUMBER	: BS01	DATE	: 2005/3/7
SERIAL NUMBER	: 0000792	TEMP./HUMI	: 22℃/42%
FCC ID	: S6MBS01	TEST MODE	: Transmitting
POWER	: DC3V	ENGINEER	: Toyokazu Imamura

Ch11:2480MHz

1.



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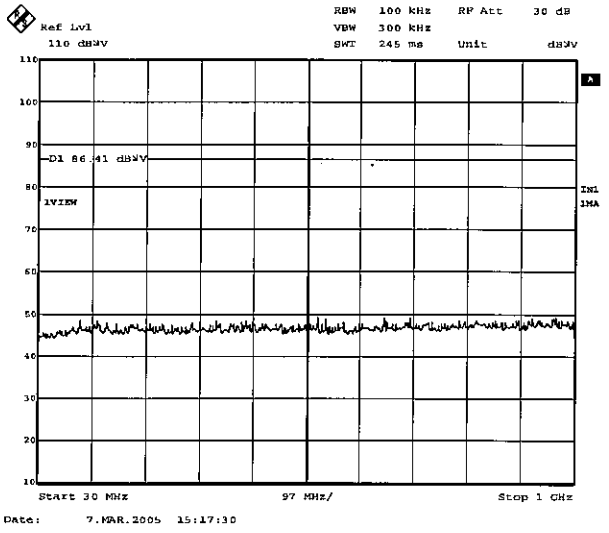
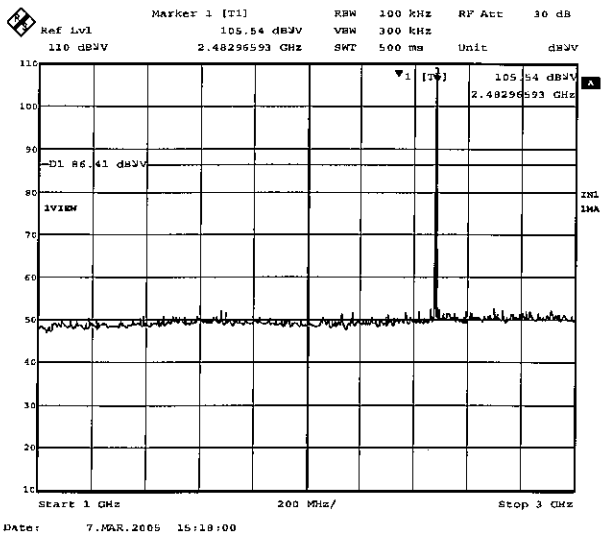


3.



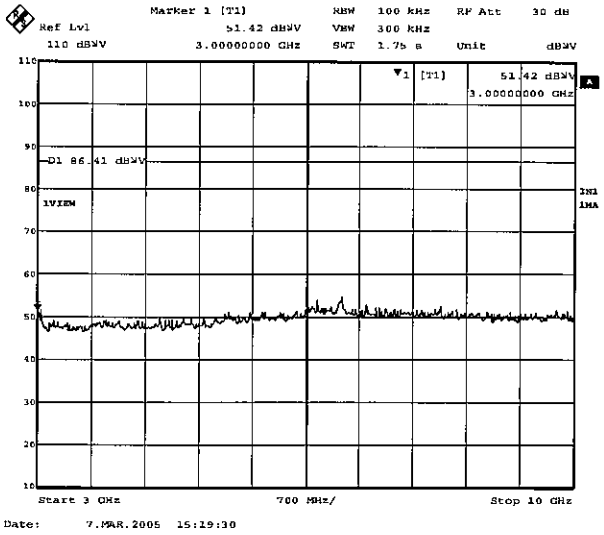
Out of Band Emission(Antenna Terminal Conducted): FCC 15.247(d)

UL Apex Co.,Ltd. Yamakita No.4 Shielded Room

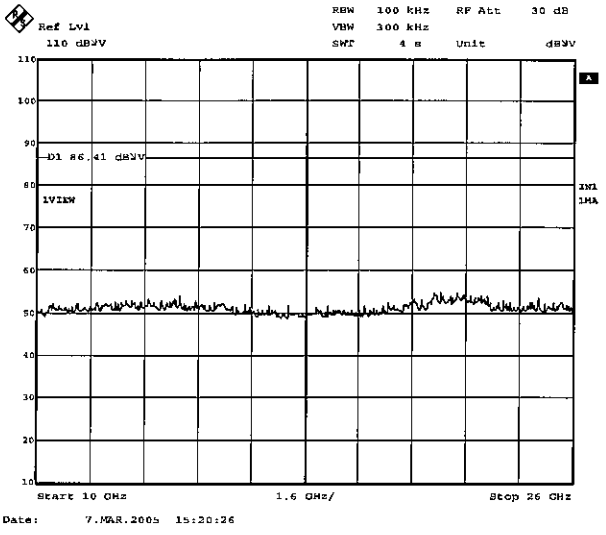
COMPANY	: SOKKIA CO.,LTD.	REPORT NO	: 25FE0137-YK-1
EQUIPMENT	: Blue Stick	REGULATION	: Fcc Part15SubpartC 247(d)
MODEL NUMBER	: BS01	DATE	: 2005/3/7
SERIAL NUMBER	: 0000792	TEMP./HUMI	: 22℃/42%
FCC ID	: S6MBS01	TEST MODE	: Transmitting
POWER	: DC3V	ENGINEER	: Toyokazu Imamura

Ch:2480MHz

4.



5.



DATA OF RADIATION TEST

UL Apex Co.,Ltd.
Yamakita No.2 Open Test Site
Report No. : 25FE0137-YK-1

Applicant : SOKKIA CO., LTD.
Kind of Equipment : Blue Stick
Model No. : BS01
Serial No. : 0000792
Power : DC3V
Mode : Transmitting (2402MHz)
Remarks :
Date : 2/3/2005
Test Distance : 3 m
Temperature : 21 ℃ Engineer : Ichiro Isozaki
Humidity : 45 %
Regulation : FCC Part15C §15.209

No.	FREQ. [MHz]	ANT TYPE	READING HOR [dBμV]	READING VER [dBμV]	ANT FACTOR [dB/m]	AMP GAIN [dB]	CABLE LOSS [dB]	ATTEN. [dB]	RESULT HOR [dBμV/m]	RESULT VER [dBμV/m]	LIMITS [dBμV/m]	MARGIN HOR [dB]	MARGIN VER [dB]
1.	92.29	BB	36.3	44.5	8.2	27.8	1.9	6.0	24.6	32.8	43.5	18.9	10.7
2.	117.02	BB	35.4	41.9	12.3	27.9	2.2	6.0	28.0	34.5	43.5	15.5	9.0
3.	130.01	BB	27.4	33.0	13.5	28.1	2.3	6.0	21.1	26.7	43.5	22.4	16.8
4.	143.01	BB	24.1	31.4	14.4	28.0	2.4	6.0	18.9	26.2	43.5	24.6	17.3
5.	163.26	BB	27.4	36.7	15.8	28.0	2.6	6.0	23.8	33.1	43.5	19.7	10.4
6.	415.23	BB	23.2	29.8	17.8	28.2	4.3	6.0	23.1	29.7	46.0	22.9	16.3
7.	464.61	BB	32.5	34.3	18.0	28.5	4.5	6.0	32.5	34.3	46.0	13.5	11.7
8.	597.37	BB	32.4	39.2	19.7	28.8	5.2	6.0	34.5	41.3	46.0	11.5	4.7

CALCULATION: READING + ANT. FACTOR + CABLE LOSS - AMP. GAIN + ATTEN.

■ANTENNA:KBA-02 (BBA9106) 30-299MHz/KLA-02 (USLP9143) 300-1000MHz
■AMP:KAF-03 (8447D) ■RECEIVER:KTR-04 (ESVS10) ■CABLE:KCC-20/21/22/23/29

DATA OF RADIATION TEST

UL Apex Co.,Ltd.
Yamakita No.2 Open Test Site
Report No. : 25FE0137-YK - 1

Applicant	:	SOKKIA CO., LTD.	
Kind of Equipment	:	Blue Stick	
Model No.	:	BS01	
Serial No.	:	0000792	
Power	:	DC3V	
Mode	:	Transmitting (2441MHz)	
Remarks	:		
Date	:	2/3/2005	
Test Distance	:	3 m	
Temperature	:	21 ℃	Engineer : Ichiro Isozaki
Humidity	:	45 %	
Regulation	:	FCC Part15C §15.209	

No.	FREQ. [MHz]	ANT TYPE	READING HOR [dBμV]	READING VER [dBμV]	ANT FACTOR [dB/m]	AMP GAIN [dB]	CABLE LOSS [dB]	ATTEN. [dB]	RESULT HOR [dBμV/m]	RESULT VER [dBμV/m]	LIMITS [dBμV/m]	MARGIN HOR [dB]	MARGIN VER [dB]
1.	91.83	BB	38.0	48.0	8.1	27.8	1.9	6.0	26.2	36.2	43.5	17.3	7.3
2.	117.00	BB	35.7	42.0	12.3	27.9	2.2	6.0	28.3	34.6	43.5	15.2	8.9
3.	130.02	BB	26.5	33.8	13.5	28.1	2.3	6.0	20.2	27.5	43.5	23.3	16.0
4.	143.00	BB	23.9	31.1	14.4	28.0	2.4	6.0	18.7	25.9	43.5	24.8	17.6
5.	175.14	BB	32.2	39.2	16.6	27.8	2.7	6.0	29.7	36.7	43.5	13.8	6.8
6.	415.23	BB	25.1	26.9	17.8	28.2	4.3	6.0	25.0	26.8	46.0	21.0	19.2
7.	464.59	BB	31.4	34.0	18.0	28.5	4.5	6.0	31.4	34.0	46.0	14.6	12.0
8.	597.36	BB	30.7	35.3	19.7	28.8	5.2	6.0	32.8	37.4	46.0	13.2	8.6

CALCULATION: READING + ANT. FACTOR + CABLE LOSS - AMP. GAIN + ATTEN.

■ANTENNA:KBA-02 (BBA9106) 30-299MHz/KLA-02 (USLP9143) 300-1000MHz
■AMP:KAF-03 (8447D) ■RECEIVER:KTR-04 (ESVS10) ■CABLE:KCC-20/21/22/23/29

DATA OF RADIATION TEST

UL Apex Co.,Ltd.
Yamakita No.2 Open Test Site
Report No. : 25FE0137-YK - 1

Applicant	: SOKKIA CO., LTD.		
Kind of Equipment	: Blue Stick		
Model No.	: BS01		
Serial No.	: 0000792		
Power	: DC3V		
Mode	: Transmitting (2480MHz)		
Remarks	:		
Date	: 2/3/2005		
Test Distance	: 3 m		
Temperature	: 21 ℃	Engineer	: Ichiro Isozaki
Humidity	: 45 %		
Regulation	: FCC Part15C §15.209		

No.	FREQ. [MHz]	ANT TYPE	READING HOR [dBμV]	READING VER [dBμV]	ANT FACTOR [dB/m]	AMP GAIN [dB]	CABLE LOSS [dB]	ATTEN. [dB]	RESULT HOR [dBμV/m]	RESULT VER [dBμV/m]	LIMITS [dBμV/m]	MARGIN HOR [dB]	MARGIN VER [dB]
1.	91.89	BB	38.0	45.4	8.1	27.8	1.9	6.0	26.2	33.6	43.5	17.3	9.9
2.	117.00	BB	35.9	42.3	12.3	27.9	2.2	6.0	28.5	34.9	43.5	15.0	8.6
3.	130.01	BB	27.2	34.8	13.5	28.1	2.3	6.0	20.9	28.5	43.5	22.6	15.0
4.	142.99	BB	25.2	32.1	14.4	28.0	2.4	6.0	20.0	26.9	43.5	23.5	16.6
5.	175.14	BB	30.6	39.0	16.6	27.8	2.7	6.0	28.1	36.5	43.5	15.4	7.0
6.	464.54	BB	26.4	32.2	18.0	28.5	4.5	6.0	26.4	32.2	46.0	19.6	13.8
7.	597.32	BB	28.4	35.0	19.7	28.8	5.2	6.0	30.5	37.1	46.0	15.5	8.9

CALCULATION: READING + ANT. FACTOR + CABLE LOSS - AMP. GAIN + ATTEN.

■ANTENNA:KBA-02 (BBA9106) 30-299MHz/KLA-02 (USLP9143) 300-1000MHz
■AMP:KAF-03 (8447D) ■RECEIVER:KTR-04 (ESVS10) ■CABLE:KCC-20/21/22/23/29

DATA OF RADIATION TEST

UL Apex Co.,Ltd.
Yamakita No.2 Open Test Site
Report No. : 25FE0137-YK－1

Applicant : SOKKIA CO., LTD.
Kind of Equipment : Blue Stick
Model No. : BS01
Serial No. : 0000792
Power : DC3V
Mode : Transmitting (2402MHz)
Remarks :
Date : 2/21/2005
Test Distance : 3 m
Temperature : 25 ℃
Humidity : 37 %
Regulation : FCC Part15C §15.209 (PK Detection)

Engineer : Toyokazu Imamura

No.	FREQ. [MHz]	ANT TYPE	READING HOR [dBμV]	READING VER [dBμV]	ANT FACTOR [dB/m]	AMP GAIN [dB]	CABLE LOSS [dB]	ATTEN. [dB]	RESULT HOR [dBμV/m]	RESULT VER [dBμV/m]	LIMITS [dBμV/m]	MARGIN HOR [dB]	MARGIN VER [dB]
1.	2389.07	BB	46.3	49.5	27.7	34.1	4.3	10.1	54.3	57.5	74.0	19.7	16.5
2.	2390.00	BB	47.0	45.8	27.7	34.1	4.3	10.1	55.0	53.8	74.0	19.0	20.2
3.	4804.00	BB	52.6	54.2	32.0	34.0	5.5	0.6	56.7	58.3	74.0	17.3	15.7
4.	7206.00	BB	50.0	45.4	36.5	34.2	6.5	0.3	59.1	54.5	74.0	14.9	19.5
5.	9608.00	BB	48.3	49.0	38.9	35.1	6.9	0.9	59.9	60.6	74.0	14.1	13.4
6.	12010.00	BB	42.9	43.0	39.9	34.4	7.9	0.4	56.7	56.8	74.0	17.3	17.2
7.	14412.00	BB	43.0	43.0	42.5	33.4	8.3	0.6	61.0	61.0	74.0	13.0	13.0
8.	16814.00	BB	43.2	43.5	40.4	33.8	9.0	0.9	59.7	60.0	74.0	14.3	14.0
9.	19216.00	BB	42.3	42.7	40.8	33.2	9.5	0.0	59.4	59.8	74.0	14.6	14.2
10.	21618.00	BB	44.2	43.7	39.0	33.4	10.1	0.0	59.9	59.4	74.0	14.1	14.6
11.	24020.00	BB	43.1	43.5	39.3	32.4	10.5	0.0	60.5	60.9	74.0	13.5	13.1

CALCULATION: READING + ANT.FACTOR + CABLE LOSS - AMP.GAIN + ATTEN.

■ANTENNA:KHA-02 (1-18GHz) /KHA-04 (18-26GHz)
■AMP:KAF-04 (8449B) ■SPECTRUM ANALYZER:KTR-01 ■CABLE:KCC-D3/D7

DATA OF RADIATION TEST

UL Apex Co.,Ltd.
Yamakita No.2 Open Test Site
Report No.: 25FE0137-YK - 1

Applicant	: SOKKIA CO.,LTD.
Kind of Equipment	: Blue Stick
Model No.	: BS01
Serial No.	: 0000792
Power	: DC3V
Mode	: Transmitting(2402MHz)
Remarks	:
Date	: 2/21/2005
Test Distance	: 3 m
Temperature	: 25 ℃
Humidity	: 37 %
Regulation	: FCC Part15C §15.209(AV Detection)

Engineer : Toyokazu Imamura

No.	FREQ. [MHz]	ANT TYPE	READING HOR [dBμV]	READING VER [dBμV]	ANT FACTOR [dB/m]	AMP GAIN [dB]	CABLE LOSS [dB]	ATTEN. [dB]	RESULT HOR [dBμV/m]	RESULT VER [dBμV/m]	LIMITS [dBμV/m]	MARGIN HOR [dB]	MARGIN VER [dB]
1.	2389.07	BB	33.4	32.6	27.7	34.1	4.3	10.1	41.4	40.6	54.0	12.6	13.4
2.	2390.00	BB	31.5	31.4	27.7	34.1	4.3	10.1	39.5	39.4	54.0	14.5	14.6
3.	4804.00	BB	46.0	47.6	32.0	34.0	5.5	0.6	50.1	51.7	54.0	3.9	2.3
4.	7206.00	BB	41.8	34.7	36.5	34.2	6.5	0.3	50.9	43.8	54.0	3.1	10.2
5.	9608.00	BB	38.8	39.9	38.9	35.1	6.9	0.9	50.4	51.5	54.0	3.6	2.5
6.	12010.00	BB	31.4	30.7	39.9	34.4	7.9	0.4	45.2	44.5	54.0	8.8	9.5
7.	14412.00	BB	30.4	30.4	42.5	33.4	8.3	0.6	48.4	48.4	54.0	5.6	5.6
8.	16814.00	BB	30.4	30.4	40.4	33.8	9.0	0.9	46.9	46.9	54.0	7.1	7.1
9.	19216.00	BB	29.9	30.0	40.8	33.2	9.5	0.0	47.0	47.1	54.0	7.0	6.9
10.	21618.00	BB	30.6	30.6	39.0	33.4	10.1	0.0	46.3	46.3	54.0	7.7	7.7
11.	24020.00	BB	31.0	31.0	39.3	32.4	10.5	0.0	48.4	48.4	54.0	5.6	5.6

CALCULATION: READING + ANT.FACTOR + CABLE LOSS - AMP.GAIN + ATTEN.

■ANTENNA:KHA-02(1-18GHz)/KHA-04(18-26GHz)
■AMP:KAF-04(8449B) ■SPECTRUM ANALYZER:KTR-01 ■CABLE:KCC-D3/D7

DATA OF RADIATION TEST

UL Apex Co.,Ltd.
Yamakita No.2 Open Test Site
Report No. : 25FE0137-YK - 1

Applicant	: SOKKIA CO., LTD.		
Kind of Equipment	: Blue Stick		
Model No.	: BS01		
Serial No.	: 0000792		
Power	: DC3V		
Mode	: Transmitting (2441MHz)		
Remarks	:		
Date	: 2/21/2005		
Test Distance	: 3 m		
Temperature	: 25 ℃	Engineer	: Toyokazu Imamura
Humidity	: 37 %		
Regulation	: FCC Part15C §15.209 (PK Detection)		

No.	FREQ. [MHz]	ANT TYPE	READING HOR [dBμV]	READING VER [dBμV]	ANT FACTOR [dB/m]	AMP GAIN [dB]	CABLE LOSS [dB]	ATTEN. [dB]	RESULT HOR [dBμV/m]	RESULT VER [dBμV/m]	LIMITS [dBμV/m]	MARGIN HOR [dB]	MARGIN VER [dB]
1.	4882.00	BB	53.2	52.1	32.2	34.0	5.5	0.6	57.5	56.4	74.0	16.5	17.6
2.	7323.00	BB	50.1	43.6	36.7	34.3	6.6	0.3	59.4	52.9	74.0	14.6	21.1
3.	9764.00	BB	47.0	45.2	39.1	35.1	6.9	1.0	58.9	57.1	74.0	15.1	16.9
4.	12205.00	BB	45.3	44.3	39.5	34.2	7.9	0.4	58.9	57.9	74.0	15.1	16.1
5.	14646.00	BB	43.2	44.0	42.0	33.7	8.4	0.6	60.5	61.3	74.0	13.5	12.7
6.	17087.00	BB	43.0	43.1	41.2	33.6	9.1	0.8	60.5	60.6	74.0	13.5	13.4
7.	19528.00	BB	43.0	42.5	40.1	33.7	9.9	0.0	59.3	58.8	74.0	14.7	15.2
8.	21969.00	BB	44.5	44.2	39.5	33.7	10.2	0.0	60.5	60.2	74.0	13.5	13.8
9.	24410.00	BB	44.2	43.7	39.5	32.5	10.6	0.0	61.8	61.3	74.0	12.2	12.7

CALCULATION: READING + ANT. FACTOR + CABLE LOSS - AMP. GAIN + ATTEN.

■ANTENNA:KHA-02 (1-18GHz) /KHA-04 (18-26GHz)
■AMP:KAF-04 (8449B) ■SPECTRUM ANALYZER:KTR-01 ■CABLE:KCC-D3/D7

DATA OF RADIATION TEST

UL Apex Co.,Ltd.
Yamakita No.2 Open Test Site
Report No. : 25FE0137-YK - 1

Applicant	: SOKKIA CO.,LTD.		
Kind of Equipment	: Blue Stick		
Model No.	: BS01		
Serial No.	: 0000792		
Power	: DC3V		
Mode	: Transmitting(2441MHz)		
Remarks	:		
Date	: 2/21/2005		
Test Distance	: 3 m		
Temperature	: 25 ℃	Engineer	: Toyokazu Imamura
Humidity	: 37 %		
Regulation	: FCC Part15C §15.209(AV Detection)		

No.	FREQ. [MHz]	ANT TYPE	READING HOR [dBμV]	READING VER [dBμV]	ANT FACTOR [dB/m]	AMP GAIN [dB]	CABLE LOSS [dB]	ATTEN. [dB]	RESULT HOR [dBμV/m]	RESULT VER [dBμV/m]	LIMITS [dBμV/m]	MARGIN HOR [dB]	MARGIN VER [dB]
1.	4882.00	BB	46.4	45.6	32.2	34.0	5.5	0.6	50.7	49.9	54.0	3.3	4.1
2.	7323.00	BB	42.3	33.6	36.7	34.3	6.6	0.3	51.6	42.9	54.0	2.4	11.1
3.	9764.00	BB	36.6	34.3	39.1	35.1	6.9	1.0	48.5	46.2	54.0	5.5	7.8
4.	12205.00	BB	33.0	31.3	39.5	34.2	7.9	0.4	46.6	44.9	54.0	7.4	9.1
5.	14646.00	BB	30.5	30.5	42.0	33.7	8.4	0.6	47.8	47.8	54.0	6.2	6.2
6.	17087.00	BB	30.3	30.3	41.2	33.6	9.1	0.8	47.8	47.8	54.0	6.2	6.2
7.	19528.00	BB	30.0	30.0	40.1	33.7	9.9	0.0	46.3	46.3	54.0	7.7	7.7
8.	21969.00	BB	31.7	31.7	39.5	33.7	10.2	0.0	47.7	47.7	54.0	6.3	6.3
9.	24410.00	BB	31.3	31.3	39.5	32.5	10.6	0.0	48.9	48.9	54.0	5.1	5.1

CALCULATION: READING + ANT.FACTOR + CABLE LOSS - AMP.GAIN + ATTEN.

■ANTENNA:KHA-02(1-18GHz)/KHA-04(18-26GHz)
■AMP:KAF-04(8449B) ■SPECTRUM ANALYZER:KTR-01 ■CABLE:KCC-D3/D7

DATA OF RADIATION TEST

UL Apex Co.,Ltd.
Yamakita No.2 Open Test Site
Report No. : 25FE0137-YK - 1

Applicant	: SOKKIA CO., LTD.
Kind of Equipment	: Blue Stick
Model No.	: BS01
Serial No.	: 0000792
Power	: DC3V
Mode	: Transmitting (2480MHz)
Remarks	:
Date	: 2/21/2005
Test Distance	: 3 m
Temperature	: 25 ℃
Humidity	: 37 %
Regulation	: FCC Part15C §15.209 (PK Detection)

Engineer : Toyokazu Imamura

No.	FREQ. [MHz]	ANT TYPE	READING HOR [dBμV]	READING VER [dBμV]	ANT FACTOR [dB/m]	AMP GAIN [dB]	CABLE LOSS [dB]	ATTEN. [dB]	RESULT HOR [dBμV/m]	RESULT VER [dBμV/m]	LIMITS [dBμV/m]	MARGIN HOR [dB]	MARGIN VER [dB]
1.	2483.50	BB	55.1	51.9	28.0	34.0	4.4	10.1	63.6	60.4	74.0	10.4	13.6
2.	4960.00	BB	50.9	48.9	32.3	34.0	5.5	0.7	55.4	53.4	74.0	18.6	20.6
3.	7440.00	BB	47.4	45.6	36.8	34.4	6.7	0.4	56.9	55.1	74.0	17.1	18.9
4.	9920.00	BB	46.4	46.2	39.3	35.1	7.0	1.1	58.7	58.5	74.0	15.3	15.5
5.	12400.00	BB	46.7	45.2	39.2	34.0	7.8	0.5	60.2	58.7	74.0	13.8	15.3
6.	14880.00	BB	43.1	43.5	41.3	33.9	8.5	0.6	59.6	60.0	74.0	14.4	14.0
7.	17360.00	BB	43.5	42.8	41.9	33.5	9.1	0.4	61.4	60.7	74.0	12.6	13.3
8.	19840.00	BB	42.6	42.6	40.0	33.8	10.0	0.0	58.8	58.8	74.0	15.2	15.2
9.	22320.00	BB	44.8	44.4	39.9	33.0	10.1	0.0	61.8	61.4	74.0	12.2	12.6
10.	24800.00	BB	44.6	44.1	39.7	32.4	11.0	0.0	62.9	62.4	74.0	11.1	11.6

CALCULATION: READING + ANT. FACTOR + CABLE LOSS - AMP. GAIN + ATTEN.

■ANTENNA:KHA-02 (1-18GHz) /KHA-04 (18-26GHz)
■AMP:KAF-04 (8449B) ■SPECTRUM ANALYZER:KTR-01 ■CABLE:KCC-D3/D7

DATA OF RADIATION TEST

UL Apex Co.,Ltd.
Yamakita No.2 Open Test Site
Report No.: 25FE0137-YK - 1

Applicant	:	SOKKIA CO.,LTD.	
Kind of Equipment	:	Blue Stick	
Model No.	:	BS01	
Serial No.	:	0000792	
Power	:	DC3V	
Mode	:	Transmitting(2480MHz)	
Remarks	:		
Date	:	2/21/2005	
Test Distance	:	3 m	
Temperature	:	25 ℃	Engineer : Toyokazu Imamura
Humidity	:	37 %	
Regulation	:	FCC Part15C § 15.209(AV Detection)	

No.	FREQ. [MHz]	ANT TYPE	READING HOR [dBμV]	READING VER [dBμV]	ANT FACTOR [dB/m]	AMP GAIN [dB]	CABLE LOSS [dB]	ATTEN. [dB]	RESULT HOR [dBμV/m]	RESULT VER [dBμV/m]	LIMITS [dBμV/m]	MARGIN HOR [dB]	MARGIN VER [dB]
1.	2483.50	BB	38.9	37.3	28.0	34.0	4.4	10.1	47.4	45.8	54.0	6.6	8.2
2.	4960.00	BB	44.7	41.4	32.3	34.0	5.5	0.7	49.2	45.9	54.0	4.8	8.1
3.	7440.00	BB	39.7	35.8	36.8	34.4	6.7	0.4	49.2	45.3	54.0	4.8	8.7
4.	9920.00	BB	34.6	33.6	39.3	35.1	7.0	1.1	46.9	45.9	54.0	7.1	8.1
5.	12400.00	BB	34.8	32.3	39.2	34.0	7.8	0.5	48.3	45.8	54.0	5.7	8.2
6.	14880.00	BB	30.3	30.7	41.3	33.9	8.5	0.6	46.8	47.2	54.0	7.2	6.8
7.	17360.00	BB	30.4	30.3	41.9	33.5	9.1	0.4	48.3	48.2	54.0	5.7	5.8
8.	19840.00	BB	30.2	30.2	40.0	33.8	10.0	0.0	46.4	46.4	54.0	7.6	7.6
9.	22320.00	BB	31.6	31.6	39.9	33.0	10.1	0.0	48.6	48.6	54.0	5.4	5.4
10.	24800.00	BB	31.8	31.7	39.7	32.4	11.0	0.0	50.1	50.0	54.0	3.9	4.0

CALCULATION: READING + ANT.FACTOR + CABLE LOSS - AMP.GAIN + ATTEN.

■ANTENNA:KHA-02(1-18GHz)/KHA-04(18-26GHz)
■AMP:KAF-04(8449B) ■SPECTRUM ANALYZER:KTR-01 ■CABLE:KCC-D3/D7

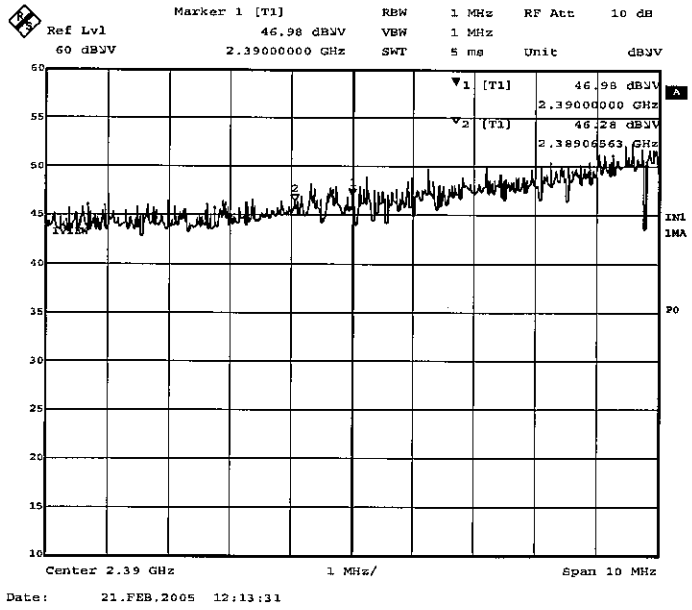
Restricted band edges: FCC 15.247(d)

UL Apex Co.,Ltd. Yamakita No.2 Open Test Site

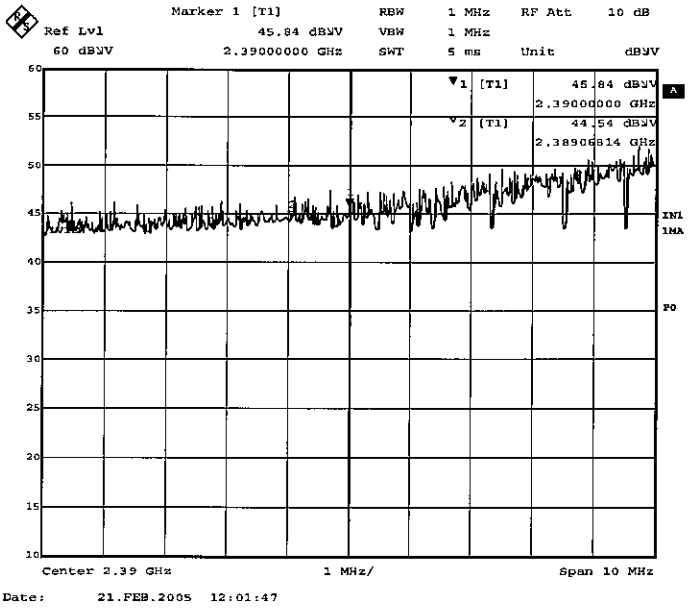
COMPANY	: SOKKIA CO.,LTD.	REPORT NO	: 25FE0137-YK-1
EQUIPMENT	: Blue Stick	REGULATION	: Fcc Part15SubpartC 247(d)
MODEL NUMBER	: BS01	DATE	: 2005/2/21
SERIAL NUMBER	: 0000792	TEMP./HUMI	: 25℃/37%
FCC ID	: S6MBS01	TEST MODE	: Transmitting
POWER	: DC3V	ENGINEER	: Toyokazu Imamura

2.39GHz(CH:2402MHz)

1. Horizontal/PK



2. Vertical/PK



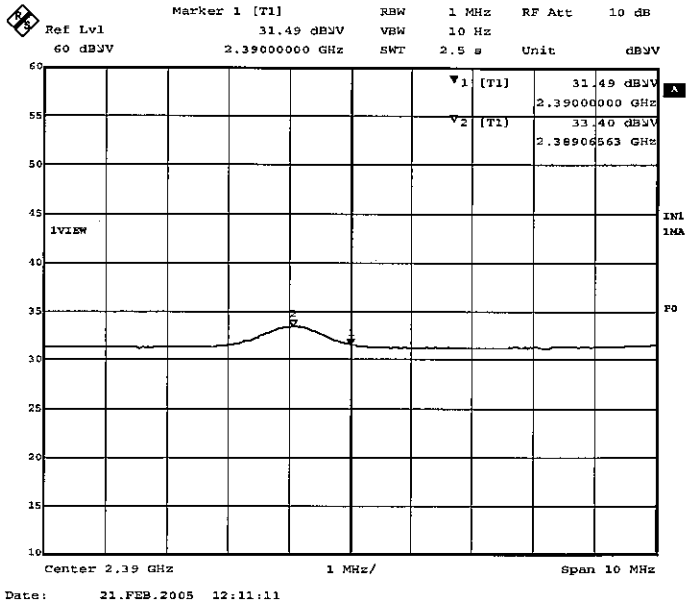
Restricted band edges: FCC 15.247(d)

UL Apex Co.,Ltd. Yamakita No.2 Open Test Site

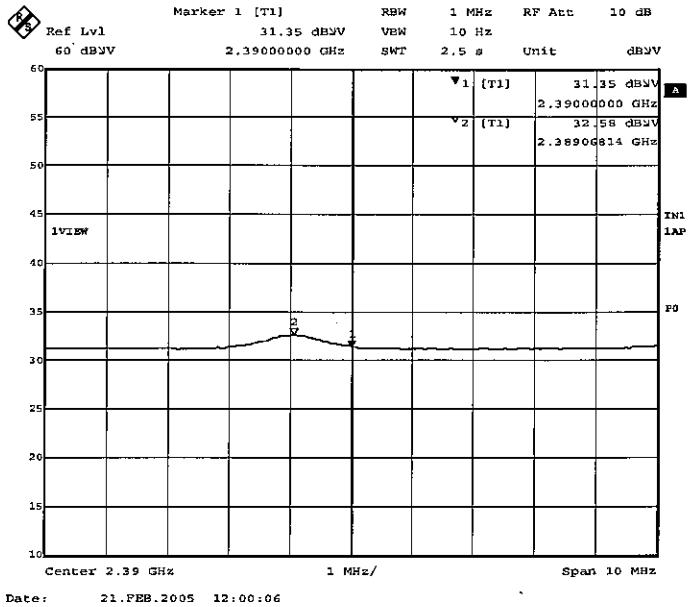
COMPANY	: SOKKIA CO.,LTD.	REPORT NO	: 25FE0137-YK-1
EQUIPMENT	: Blue Stick	REGULATION	: Fcc Part15SubpartC 247(d)
MODEL NUMBER	: BS01	DATE	: 2005/2/21
SERIAL NUMBER	: 0000792	TEMP./HUMI	: 25°C/37%
FCC ID	: S6MBS01	TEST MODE	: Transmitting
POWER	: DC3V	ENGINEER	: Toyokazu Imamura

2.39GHz(CH:2402MHz)

1. Horizontal/AV



2. Vertical/AV

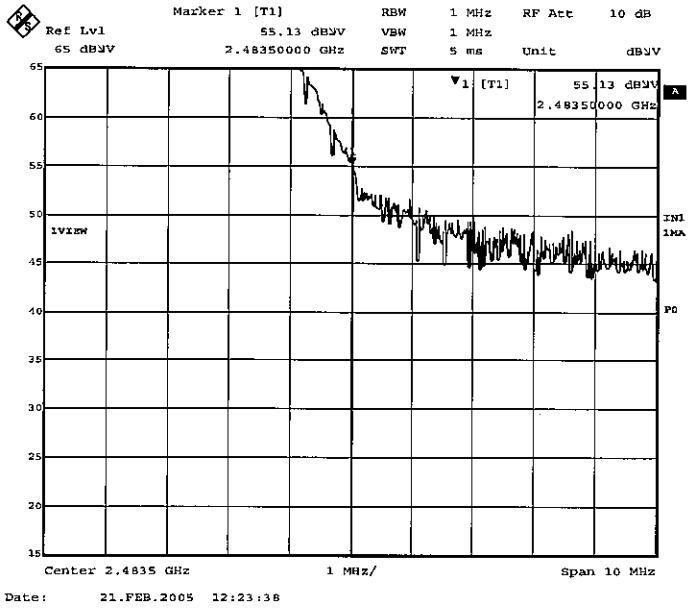


Restricted band edges: FCC 15.247(d)

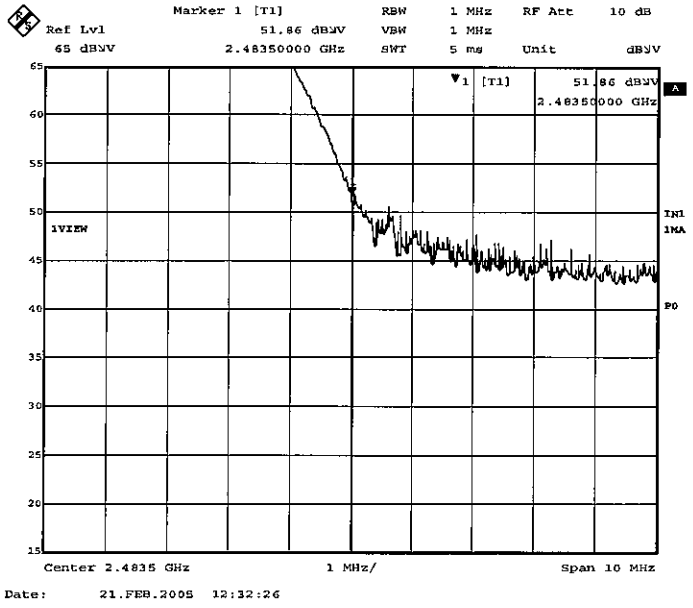
		UL Apex Co.,Ltd. Yamakita No.2 Open Test Site	
COMPANY	: SOKKIA CO.,LTD.	REPORT NO	: 25FE0137-YK-1
EQUIPMENT	: Blue Stick	REGULATION	: Fcc Part15SubpartC 247(d)
MODEL NUMBER	: BS01	DATE	: 2005/2/21
SERIAL NUMBER	: 0000792	TEMP./HUMI	: 25℃/37%
FCC ID	: S6MBS01	TEST MODE	: Transmitting
POWER	: DC3V	ENGINEER	: Toyokazu Imamura

2.4835GHz(CH:2480MHz)

1. Horizontal/PK



2. Vertical/PK



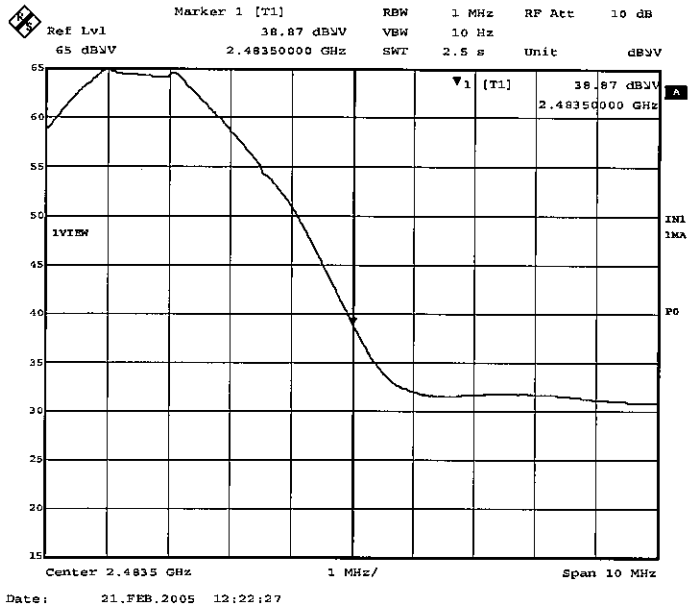
Restricted band edges: FCC 15.247(d)

UL Apex Co.,Ltd. Yamakita No.2 Open Test Site

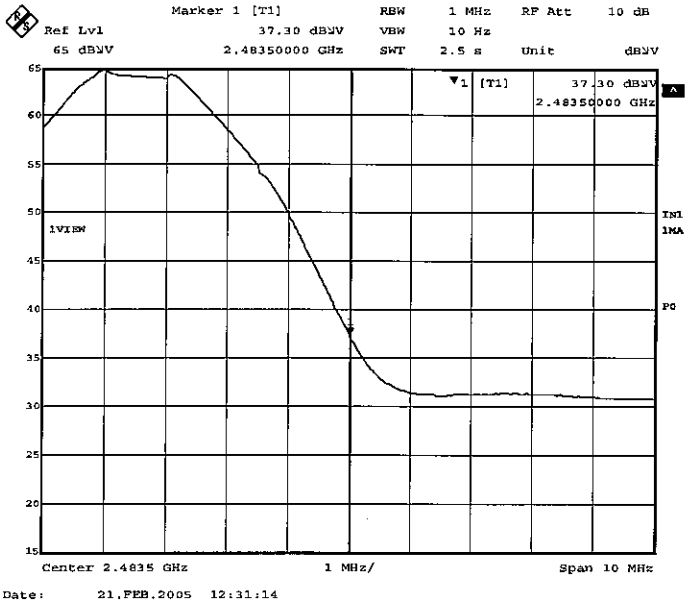
COMPANY	: SOKKIA CO.,LTD.	REPORT NO	: 25FE0137-YK-1
EQUIPMENT	: Blue Stick	REGULATION	: Fcc Part15SubpartC 247(d)
MODEL NUMBER	: BS01	DATE	: 2005/2/21
SERIAL NUMBER	: 0000792	TEMP./HUMI	: 25°C/37%
FCC ID	: S6MBS01	TEST MODE	: Transmitting
POWER	: DC3V	ENGINEER	: Toyokazu Imamura

2.4835GHz(CH:2480MHz)

1. Horizontal/AV



2. Vertical/AV



Test Report No :25FE0137-YK-1

APPENDIX 3
Test Instruments

EMI test equipment

Control No.	Instrument	Manufacturer	Model No.	Test Item	Calibration Date * Interval(month)
KAF-03	Pre Amplifier	Hewlett Packard	8447D	RE	2004/09/10 * 12
KAF-04	Pre Amplifier	Agilent	8449B	RE	2004/05/06 * 12
KAT10-S1	Attenuator	Agilent	8449D 010	RE	2005/04/12 * 12
KAT6-04	Attenuator	INMET	18N-6dB	RE	2005/04/07 * 12
KBA-02	Biconical Antenna	Schwarzbeck	BBA9106	RE	2004/08/07 * 12
KCC-20/21/22 /23/29	Coaxial Cable	Fujikura/Suhner	8D-2W/12D-SFA/S0 4272B/S04272B	RE	2004/12/27 * 12
KCC-D3/D7	Coaxial Cable	Rosenberger/Advantest	2201/JUN-08-01-06 1	RE	2005/04/12 * 12
KDT-01	Coaxial Crystal Detector	Agilent	8473C	AT 4	Pre Check
KFL-01	Highpass Filter	Hewlett Packard	84300 80038	RE	2005/04/12 * 12
KHA-02	Horn Antenna	Schwarzbeck	BBHA9120D	RE	2004/09/25 * 12
KHA-04	Horn Antenna	EMCO	3160-09	RE	2004/05/01 * 12
KTR-01	Test Receiver	Rohde & Schwarz	ESI40	RE /AT 1,2,3,4,5,6	2004/07/28 * 12
KTR-04	Test Receiver	Rohde & Schwarz	ESVS10	RE	2004/10/18 * 12
KLA-02	Logperiodic Antenna	Schwarzbeck	USLP9143	RE	2004/08/07 * 12
KOTS-02	Open Test Site	JSE	10m	RE	2004/08/09 * 12
KSA-02	Spectrum Analyzer	Advantest	R3265A	RE	2004/11/18 * 12
KST-01	Digitizing Oscilloscope	Tektronix	TDS420A	AT 4	2004/08/23 * 12

All equipment is calibrated with traceable calibrations. Each calibration is traceable to the national or international standards.

Test Item:

RE: Out of Band Emission (Radiated)
AT: Antenna terminal conducted test
1: Carrier Frequency Separation
2: 20dB Bandwidth
3: Number of Hopping Frequency
4: Dwell time
5: Maximum Peak Output Power
6: Out of Band Emission (Conducted)