

RF Exposure / SAR Statement

No. : 25EE0346-HO-1

Applicant : SATO Corporation
Type of Equipment : BARCODE PRINTER
Model No. : MB-200i-B1
FCC ID : MMFMB200I-B1

SATO Corporation declares that Model : BARCODE PRINTER complies with FCC radiation exposure requirement specified in the FCC Rules 2.1093. The "MB-200i-B1" has 1.32 mW of conducted Peak Output power and 2.12 mW of EIRP. This kind of equipment is below 60/frequency[GHz] mW(TCB Exclusion List) so that SAR testing is excluded. The Following calculation is the reference data for 20cm distance.

RF Exposure Calculations:

The following information provides the minimum separation distance for the highest gain antenna provided with the "MB-200i-B1" as calculated from FCC OET Bulletin 65 Appendix A, Table (B) Limits for General Population / Uncontrolled Exposure. This calculation is based on the highest EIRP possible from the system, considering maximum power and antenna gain, and considering a 1.0mW/cm² uncontrolled exposure limit. The Friis formula used was:

$$S = (P * G) / (4 * \pi * r^2)$$

Where

P = 1.32 mW (Maximum peak output power)
G = 1.60 Numerical Antenna gain; equal 2.04 dBi
r = 20.0 cm

For: MB-200i-B1

$$S = 0.00042 \text{ mW/cm}^2$$

UL Apex Co., Ltd.

Head Office EMC Lab.

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EMI TEST REPORT

Test Report No. : 25EE0346-HO-1

Applicant : SATO Corporation
Type of Equipment : BARCODE PRINTER
Model No. : MB200i-B1
Test standard : FCC Part 15 Subpart C
Section 15.207, Section 15.247 : 2004
FCC ID : MMFMB200I-B1
Test Result : Complied

1. This test report shall not be reproduced in full or partial, 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 report are traceable to the national or international standards.

Date of test:

January 28 to February 2, 2005

Tested by:

M. Fujimura

Mitsuru Fujimura
EMC Service

M. Kosaka

Makoto Kosaka
EMC Service

Approved by :

Naoki Sakamoto

Naoki Sakamoto
Group Leader of
EMC Service

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SECTION 1: Client information

Company Name : SATO Corporation
Address : 1-207, Onari-cho, Omiya-ku, Saitama-shi, Saitama 330-0852 Japan
Telephone Number : +81-48-663-8118
Facsimile Number : +81-48-651-6662
Contact Person : Masahiko Nanri

SECTION 2: Equipment under test (E.U.T.)

2.1 Identification of E.U.T.

Type of Equipment : BARCODE PRINTER
Model No. : MB200i-B1
Serial No. : 1-1, 1-2 (Used for Conducted tests)
2-2 (Used for Spurious emission test)
Country of Manufacture : Malaysia, Japan
Receipt Date of Sample : January 25, 2005
Condition of EUT : Production prototype
(Not for Sale: This sample is equivalent to mass-produced items.)

2.2 Product Description

Model No: MB200i-B1 is the BARCODE PRINTER.

* Model No: MB200i-B1 has series model (MB201i-B1). The difference does not affect on EMC testing results.

Original model (MB200i-B1)	Series model (MB201i-B1)
Printer for overseas export (ø 67mm in diameter: Size of paper roll)	Printer for overseas export (ø 58mm in diameter: Size of paper roll)

Clock frequency	CPU:14.7456MHz(X'tal) Internal Clock: 14.7456 x 4 = 58.9824MHz Bluetooth X'tal: 16MHz
Equipment Type	Transceiver
Frequency of Operation	2402 – 2480MHz
Bandwidth & Channel spacing	1MHz & 1MHz
Type of Modulation	0.5BT Gaussian
Antenna Type	Chip antenna (Model No.:AH 104F245001-T)
Antenna Gain	2.044 dBi max (Inverted-F ¼ lambda antenna)
Method of frequency generation	Synthesizer
ITU code	F1D
Operating voltage (Inner)	DC 3.3V
Operating temperature	-15 to +50 deg.C.

FCC 15.31 (e)

This EUT provides stable voltage(DC3.3V) constantly to RF Module regardless of input voltage. Therefore, this EUT complies with the requirement.

FCC Part 15.203 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 antenna requirement of Section 15.203.

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SECTION 3: Test specification, procedures & results

3.1 Test Specification

Test Specification : FCC Part15 Subpart C : 2004
Title : FCC 47CFR Part15 Radio Frequency Device Subpart C Intentional Radiators
Section 15.207 Conducted limits : 2004
Section 15.247 Operation within the bands 902-928MHz,
2400-2483.5MHz, and 5725-5850MHz : 2004

Remarks : This equipment adopted section 15.101(b) procedure-「However, receivers indicated as being subject to Declaration of Conformity that are contained within a transceiver, the transmitter portion of which is subject to certification, shall be authorized under the verification procedure.

3.2 Procedures and results

No.	Item	Test Procedure	Specification	Remarks	Deviation	Worst Margin*0)	Results
1	Conducted emission	ANSI C63.4:2003 7. AC powerline conducted emission measurements	Section 15.207	-	N/A	13.6dB 0.5826MHz QP, N	Complied
2	Carrier Frequency Separation	ANSI C63.4:2003 13. Measurement of intentional radiators	Section15.247(a)(1)	Conducted	N/A	*See data.	Complied
3	20dB Bandwidth	ANSI C63.4:2003 13. Measurement of intentional radiators	Section15.247(a)(1)	Conducted	N/A		Complied
4	Number of Hopping Frequency	ANSI C63.4:2003 13. Measurement of intentional radiators	Section15.247(a)(1)(iii)	Conducted	N/A		Complied
5	Dwell time	ANSI C63.4:2003 13. Measurement of intentional radiators	Section15.247(a)(1)(iii)	Conducted	N/A		Complied
6	Maximum Peak Output Power	ANSI C63.4:2003 13. Measurement of intentional radiators	Section15.247(b)(1)	Conducted	N/A		Complied
7	Band Edge Compliance	ANSI C63.4:2003 13. Measurement of intentional radiators	Section15.247(d)	Conducted	N/A		Complied
8	Spurious Emission	ANSI C63.4:2003 13. Measurement of intentional radiators	Section15.247(d)	Conducted/ Radiated	N/A	2.9dB 24020.0MHz AV, Horizontal/Vertical	Complied

Note: UL Apex's EMI Work Procedures No.QPM05.

*0) The result is rounded off to the second decimal place. Therefore, there may be 0.1 difference for the result.

Uncertainty:

*In case of the margin below the EMC Head Office's uncertainty.

The data listed in this report meets the limits unless the uncertainty is taken into consideration.

Conducted Emission

The measurement uncertainty (with a 95% confidence level) for this test is $\pm 1.3\text{dB}$.

Spurious Emission (Radiated)

The measurement uncertainty (with a 95% confidence level) for this test using Biconical antenna is $\pm 4.5\text{dB}(3\text{m})/\pm 4.7\text{dB}(10\text{m})$.

The measurement uncertainty (with a 95% confidence level) for this test using Logperiodic antenna is $\pm 5.2\text{dB}(3\text{m})/\pm 3.8\text{dB}(10\text{m})$.

The measurement uncertainty (with a 95% confidence level) for this test using Horn antenna is $\pm 6.6\text{dB}$.

Other test except Conducted Emission and Spurious Emission (Radiated)

The measurement uncertainty (with a 95% confidence level) for this test is $\pm 3.0\text{dB}$.

*These tests were also referred to FCC Public Notice DA 00-705 "Guidance on Measurement for Frequency Hopping Spread Spectrum Systems".

*These tests were performed without any deviations from test procedure except for additions or exclusions.

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3.3 Addition to standards

No.	Item	Test Procedure	Specification	Remarks	Deviation	Worst margin	Results
1	99% Occupied Band Width	RSS-210(issue 5): 2001 + Amendment:2002 + Amendment2:2003 + Amendment3:2004 + Amendment4: 2004	RSS-210(issue 5): 2001 + Amendment:2002 + Amendment2:2003 + Amendment3:2004 + Amendment4: 2004	Conducted	N/A	N/A	N/A

3.4 Test Location

UL Apex Co., Ltd. Head Office EMC Lab. *NVLAP Lab. code: 200572-0
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	Listed date (for FCC)	FCC Registration Number	IC Registration Number	Width x Depth x Height (m)	Size of reference ground plane (m) / horizontal conducting plane	Other rooms
No.1 semi-anechoic chamber	February 01, 2002	313583	IC4247	19.2 x 11.2 x 7.7m	7.0 x 6.0m	Preparation room
No.2 semi-anechoic chamber	June 05, 2002	846015	IC4247-2	7.5 x 5.8 x 5.2m	4.0 x 4.0m	-
No.3 shielded room	-	-	-	4.7 x 7.5 x 2.7m	4.7 x 7.5m	-
No.4 measurement room	-	-	-	3.1 x 5.0 x 2.7m	N/A	-

* Size of vertical conducting plane (for Conducted Emission test) : 2.0 x 2.0m for No.1 and No.2 semi-anechoic and No.3 shielded room.

3.5 Test set up, Test instruments and Data of EMI

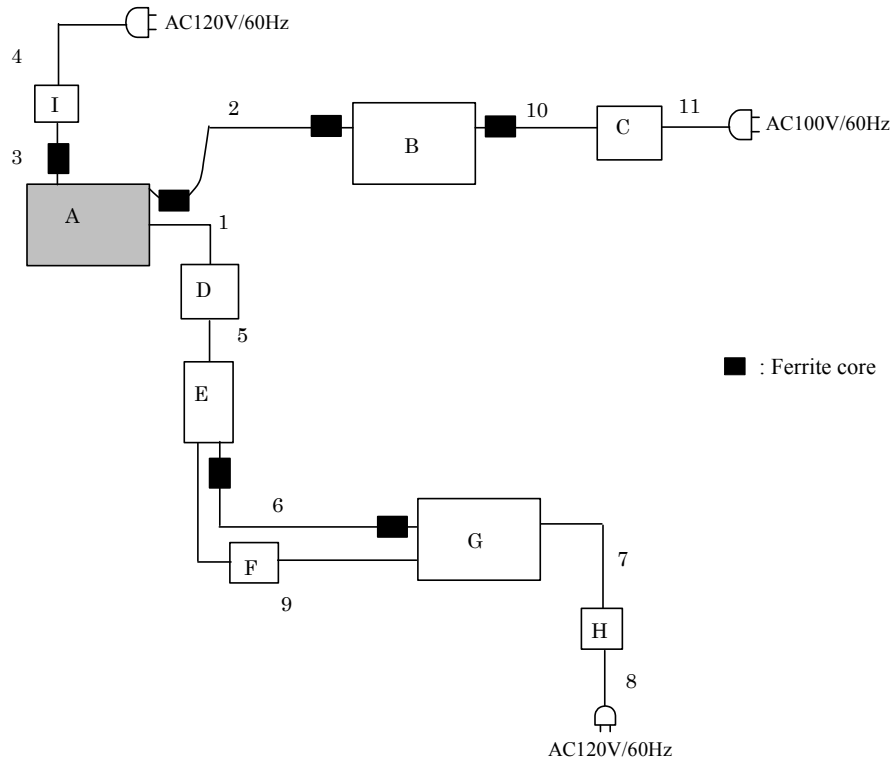
Refer to APPENDIX 1 to 3.

SECTION 4: Operation of E.U.T. during testing

4.1 Operating Modes

The mode is used : Transmitting mode(Packet size DH5)
Low Channel :2402MHz
Mid Channel :2441MHz
High channel :2480MHz
Inquiry

4.2 Configuration and peripherals



* Cabling was taken into consideration and test data was taken under worse case conditions.

Description of EUT and Support equipment

No.	Item	Model number	Serial number	Manufacturer	FCC ID
A	Barcode Printer	MB-200i-B1	1-1 *1) / 1-2 *1) 2-2 *2)	SATO	MMFMB200I-B1
B	Note PC	PC-MJ720M	1V024423	SHARP	-
C	AC Adapter	EA-RJ1V	NLD0107025900	SHARP	-
D	Joint PWB	-	-	-	-
E	Jig	N/A	N/A	SATO	-
F	Converter (USB ←→ Serial)	REX-USB60	USB600108432	RATOC SYSTEM	-
G	Note PC	PC-LM60H72DH	16007050A	NEC	-
H	AC Adapter	ADP61	1338905	NEC	-
I	AC Adapter	-	-	-	-

*1) Used for Conducted tests/*2) Used for Spurious emission test

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List of cables used

No.	Name	Length (m)	Shield	Backshell Material
1	Flexible Cable	0.15	N	-
2	RS232C Cable	1.9	Y	Polyvinyl chloride
3	DC Cable	1.6	N	Polyvinyl chloride
4	AC Cable	1.9	N	Polyvinyl chloride
5	RS232C Cable	0.05	N	Polyvinyl chloride
6	USB Cable	1.0	Y	Polyvinyl chloride
7	DC Cable	1.5	N	Polyvinyl chloride
8	AC Cable	1.0	N	Polyvinyl chloride
9	USB Cable	0.40	Y	Polyvinyl chloride
9'	RS232C Cable	0.40	Y	Polyvinyl chloride
10	DC Cable	1.7	N	Polyvinyl chloride
11	AC Cable	1.7	N	Polyvinyl chloride

SECTION 5: Conducted Emission

Test Procedure and conditions

EUT was placed on a platform of nominal size, 0.5m by 1.5m, raised 80cm above the conducting ground plane. The rear of tabletop was located 40cm to the vertical conducting plane. The rear of EUT, including peripherals aligned and flushed with rear of tabletop. All other surfaces of tabletop were at least 80cm from any other grounded conducting surface. EUT was located 80cm from a Line Impedance Stabilization Network (LISN)/ Artificial mains Network (AMN) and excess AC cable was bundled in center.

1) For the tests on EUT with other peripherals (as a whole system)

I/O cable and AC cables that were connected to the peripherals were bundled in center. They were folded back and forth forming a bundle 30cm to 40cm long and were hanged at a 40cm height to the ground plane.

The AC Mains Terminal Continuous disturbance Voltage has been measured with the EUT in a Semi Anechoic Chamber or a Measurement Room.

The EUT was connected to a LISN (AMN).

An overview sweep with peak detection has been performed.

Detector	: CISPR quasi-peak detector (IF BW 9 kHz)
Measurement range	: 0.15-30MHz
Test data	: APPENDIX 3
Test result	: Pass

SECTION 6: Spurious Emission

[Conducted]

Test Procedure

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

Test data	: APPENDIX 3
Test result	: Pass

[Radiated]

Test Procedure

EUT was placed on a platform of nominal size, 0.5m by 1.5m, raised 80cm above the conducting ground plane.

The Radiated Electric Field Strength intensity has been measured in a Semi Anechoic Chamber with a ground plane and at a distance of 3m(Below 10GHz) and 1m(Upper 10GHz).

The height of the measuring 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 with the Test Receiver or the Spectrum Analyzer.

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.

Test data	: APPENDIX 3
Test result	: Pass

- The carrier level and noise levels were confirmed at each position of X, Y and Z axes of EUT to see the position of maximum noise, and the test was made at the position that has the maximum noise.

SECTION 7: Bandwidth

Test Procedure

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

Test data	: APPENDIX 3
Test result	: Pass

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SECTION 8: Maximum Peak Output Power

Test Procedure

The Maximum Peak Output Power was measured with a spectrum analyzer connected to the antenna port.

Test data : APPENDIX 3

Test result : Pass

SECTION 9: Carrier Frequency Separation

Test Procedure

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

Test data : APPENDIX 3

Test result : Pass

SECTION 10: Number of Hopping Frequency

Test Procedure

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

Test data : APPENDIX 3

Test result : Pass

SECTION 11: Dwell time

Test Procedure

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

Test data : APPENDIX 3

Test result : Pass

APPENDIX 1: Photographs of test setup

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APPENDIX 2:Test instruments

EMI test equipment

Control No.	Instrument	Manufacturer	Model No	Test Item	Calibration Date * Interval(month)
MAEC-02	Anechoic Chamber	TDK	Semi Anechoic Chamber 3m	1,2	2004/04/12 * 12
MHA-06	Horn Antenna	Schwarzbeck	BBHA9120D	2	2005/01/10 * 12
MHA-01	Horn Antenna	EMCO	3160-09	2	2005/01/10 * 12
MCC-04	Microwave Cable 1-40G	Storm	421-011	2	2005/01/05 * 12
MCC-23	Microwave Cable	Storm	-	2	2004/05/01 * 12
MPA-01	Pre Amplifier	Agilent	8449B	2	2004/02/06 * 12
MAT-07	Attenuator(6dB)	Weinschel Corp	2	2	2004/12/16 * 12
MCC-12	Coaxial Cable	Fujikura/Agilent	-	2	2004/02/24 * 12
MBA-02	Biconical Antenna	Schwarzbeck	BBA9106	2	2004/10/14 * 12
MLA-02	Logperiodic Antenna	Schwarzbeck	USLP9143	2	2004/10/14 * 12
MPA-06	Pre Amplifier	Hewlett Packard	8447D	2	2004/08/29 * 12
MRENT-09	Spectrum Analyzer	Advantest	R3273	1,2	2004/02/18 * 12
MTR-02	Test Receiver	Rohde & Schwarz	ESCS30	1,2	2004/02/03 * 12
MLS-06	LISN(AMN)	Schwarzbeck	NSLK8127	1(EUT)	2004/02/17 * 12
MLS-07	LISN(AMN)	Schwarzbeck	NSLK8127	1	2004/02/17 * 12
MTA-07	Termination	MCL	BTRM-50	1	2004/02/16 * 12
MCC-13	Coaxial Cable	Fujikura/Agilent	-	1	2004/02/24 * 12
MSA-03	Spectrum Analyzer	Agilent	E4448A	3 to 8	2004/06/12 * 12
MDPS-04	DC Power Supply	KENWOOD TMI	PW18-1.3AT	3 to 8	Pre Check
MAT-20	Attenuator(10dB)(above 1GHz)	HIROSE ELECTRIC CO.,LTD.	AT-110	3 to 8	2005/01/11 * 12

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

Test Item:

- 1: AC Main Conducted Emission
- 2: Radiated Spurious Emission
- 3: Antenna Terminal Conducted Spurious Emission
- 4: Maximum Peak Output Power
- 5: Carrier Frequency Separation[FHSS]
- 6: 20dB Bandwidth[FHSS]
- 7: Number of Hopping Frequency[FHSS]
- 8: Dwell time[FHSS]

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APPENDIX 3: Data of EMI test

Conducted Emission

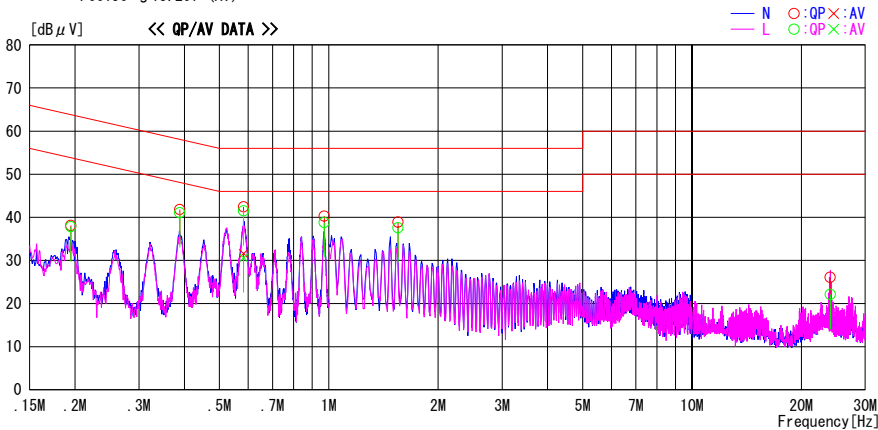
DATA OF CONDUCTED EMISSION TEST

UL Apex Co., Ltd. Head Office EMC Lab. No.2 Semi Anechoic Chamber
Date : 2005/02/01 23:44:50

Applicant : SATO CORPORATION
Kind of EUT : Barcode Printer
Model No. : MB200i-B1
Serial No. : 2-2
Report No. : 25EE0346-HO
Power : AC120V/60Hz
Temp°C/Humi% : 25deg.C / 23%
Operator : Makoto Kosaka

Mode / Remarks : Tx 2402MHz

LIMIT : FCC15C § 15.207 (QP)
FCC15C § 15.207 (AV)



NO	FREQ [MHz]	READING		C.F	RESULT		LIMIT		MARGIN		PHASE
		QP [dBμV]	AV [dBμV]		QP [dBμV]	AV [dBμV]	QP [dBμV]	AV [dBμV]	QP [dB]	AV [dB]	
1	0.1949	38.1	---	0.0	38.1	---	63.8	---	25.7	---	N
2	0.3889	41.7	---	0.1	41.8	---	58.1	---	16.3	---	N
3	0.5826	42.2	31.4	0.2	42.4	31.6	56.0	46.0	13.6	14.4	N
4	0.9711	40.1	---	0.2	40.3	---	56.0	---	15.7	---	N
5	1.5520	38.6	---	0.3	38.9	---	56.0	---	17.1	---	N
6	24.0200	24.0	---	2.1	26.1	---	60.0	---	33.9	---	N
7	0.1949	37.8	---	0.0	37.8	---	63.8	---	26.0	---	L
8	0.3889	41.0	---	0.1	41.1	---	58.1	---	17.0	---	L
9	0.5826	41.3	30.4	0.2	41.5	30.6	56.0	46.0	14.5	15.4	L
10	0.9711	38.6	---	0.2	38.8	---	56.0	---	17.2	---	L
11	1.5520	37.3	---	0.3	37.6	---	56.0	---	18.4	---	L
12	24.0200	20.0	---	2.1	22.1	---	60.0	---	37.9	---	L

CHART:WITH FACTOR,Peak hold data.Data is uncorrected. CALCURATION:RESULT=READING+C.F (LISN LOSS+CABLE LOSS)
Except for the above table : adequate margin data below the limits.

Conducted Emission

DATA OF CONDUCTED EMISSION TEST

UL Apex Co., Ltd. Head Office EMC Lab. No.2 Semi Anechoic Chamber
Date : 2005/02/02 00:08:08

Applicant : SATO CORPORATION
Kind of EUT : Barcode Printer
Model No. : MB200i-B1
Serial No. : 2-2

Report No. : 25EE0346-H0
Power : AC120V/60Hz
Temp°C/Humi% : 25deg. C / 23%
Operator : Makoto Kosaka

Mode / Remarks : Tx 2441MHz

LIMIT : FCC15C § 15.207 (QP)
FCC15C § 15.207 (AV)

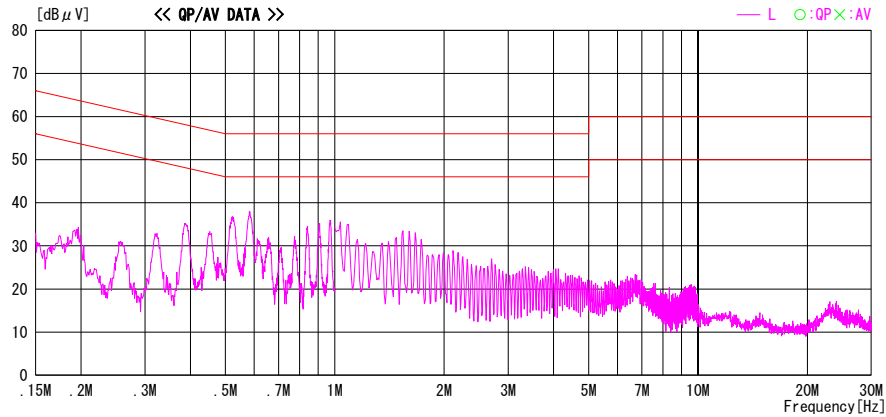
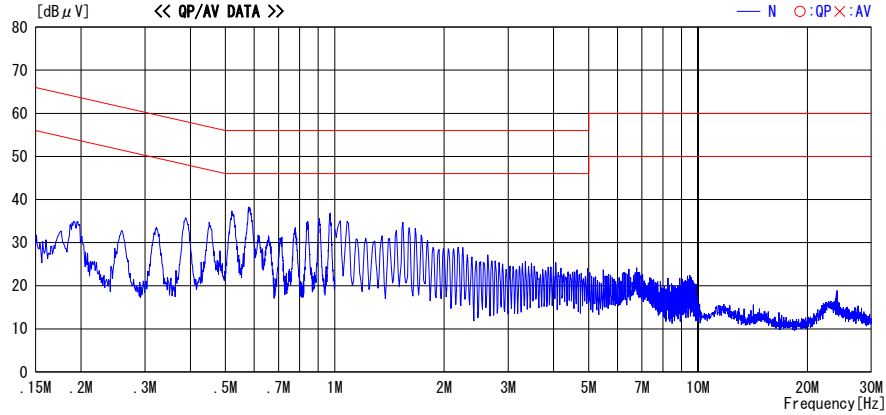


CHART:WITH FACTOR,Peak hold data.Data is uncorrected. CALCURATION:RESULT=READING+C.F(LISN LOSS+CABLE LOSS)
Except for the above table : adequate margin data below the limits.

Conducted Emission

DATA OF CONDUCTED EMISSION TEST

UL Apex Co., Ltd. Head Office EMC Lab. No.2 Semi Anechoic Chamber
Date : 2005/02/02 00:15:11

Applicant : SATO CORPORATION
Kind of EUT : Barcode Printer
Model No. : MB200i-B1
Serial No. : 2-2

Report No. : 25EE0346-HO
Power : AC120V/60Hz
Temp°C/Humi% : 25deg. C / 23%
Operator : Makoto Kosaka

Mode / Remarks : Tx 2480MHz

LIMIT : FCC15C § 15.207 (QP)
FCC15C § 15.207 (AV)

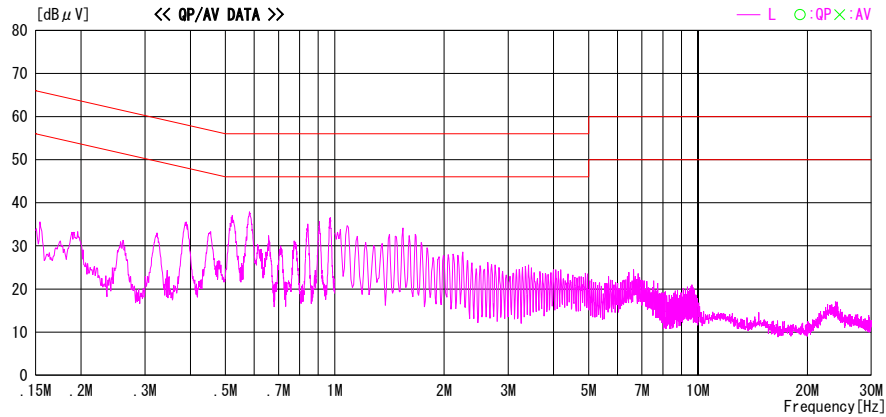
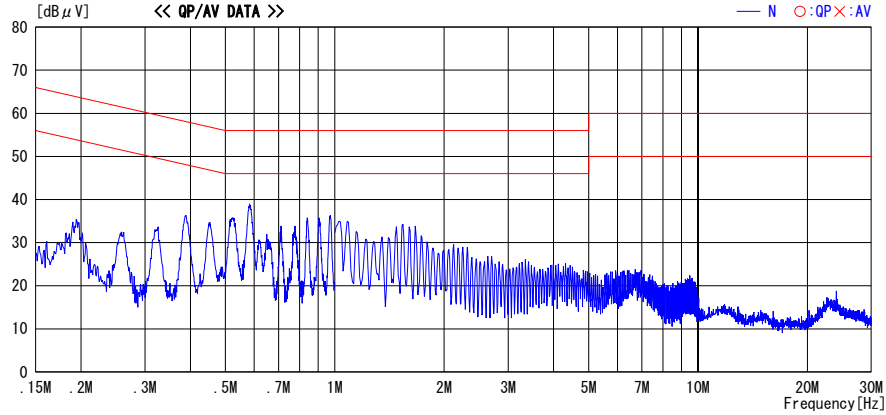


CHART: WITH FACTOR, Peak hold data. Data is uncorrected. CALCURATION: RESULT=READING+C.F (LISN LOSS+CABLE LOSS)
Except for the above table : adequate margin data below the limits.

Carrier Frequency Separation

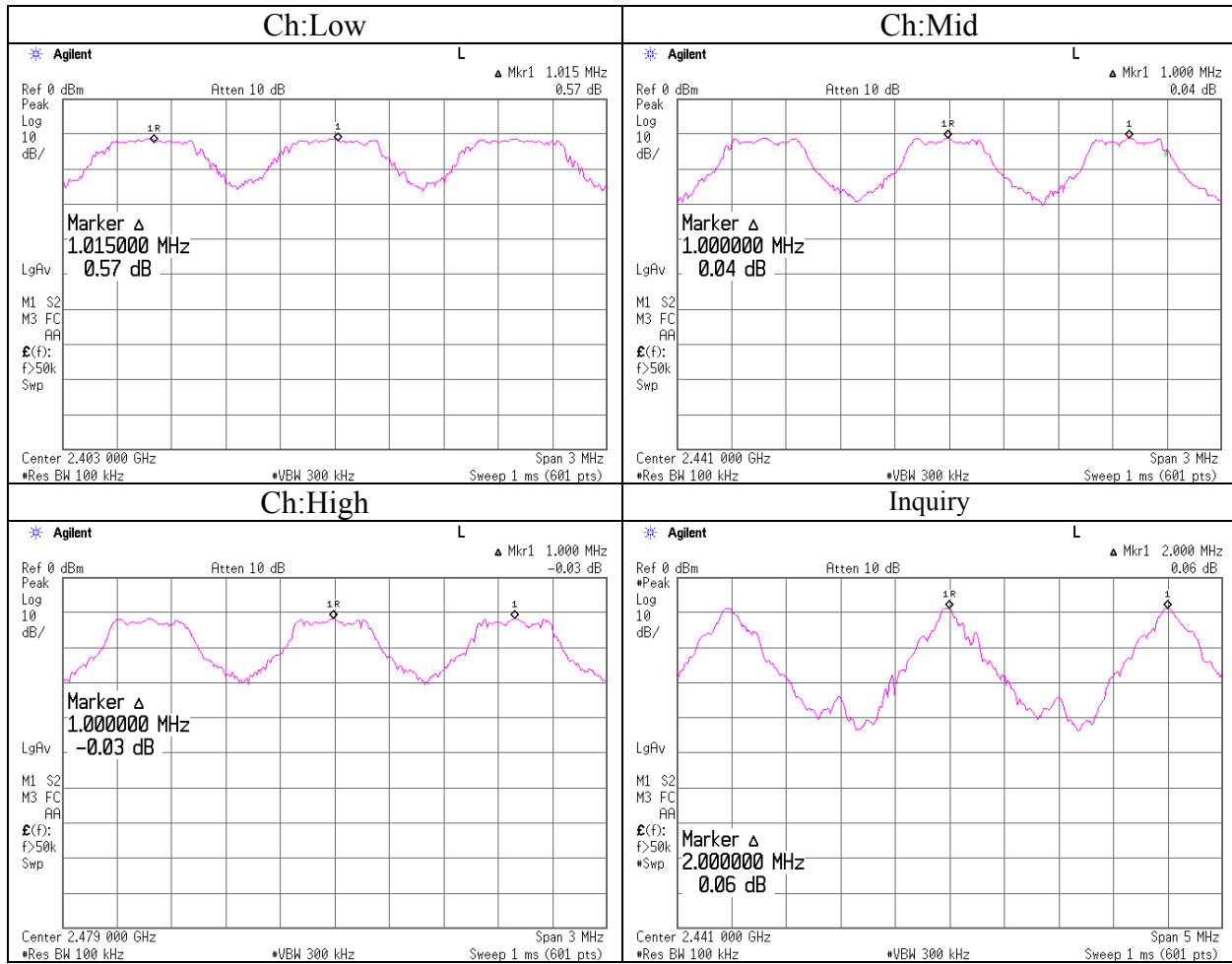
DATA OF CARRIER FREQUENCY SEPARATION

UL Apex Co., Ltd.
Head Office EMC Lab. No.3 Measurement Room

COMPANY	: SATO CORPORATION	REGULATION	: Fcc Part15 Subpart C 15.247(a)(1)
EQUIPMENT	: Barcode Printer	TEST DISTANCE	: -
MODEL	: MB200i-B1	DATE	: 28/01/2005
S/ N	: 1-1 / 1-2	TEMPERATURE	: 24deg.C
POWER	: DC5V	HUMIDITY	: 25%
MODE	: Tx(Hopping on) / Inquiry	ENGINEER	: Mitsuru Fujimura

Ch	Freq. [MHz]	Channel separation [MHz]	Limit
Low	2402.0	1.015	>20dB Bandwidth and 25[kHz]
Mid	2441.0	1.000	>20dB Bandwidth and 25[kHz]
High	2480.0	1.000	>20dB Bandwidth and 25[kHz]
Inquiry	2441.0	2.000	>20dB Bandwidth and 25[kHz]

Carrier Frequency Separation



20dB Bandwidth

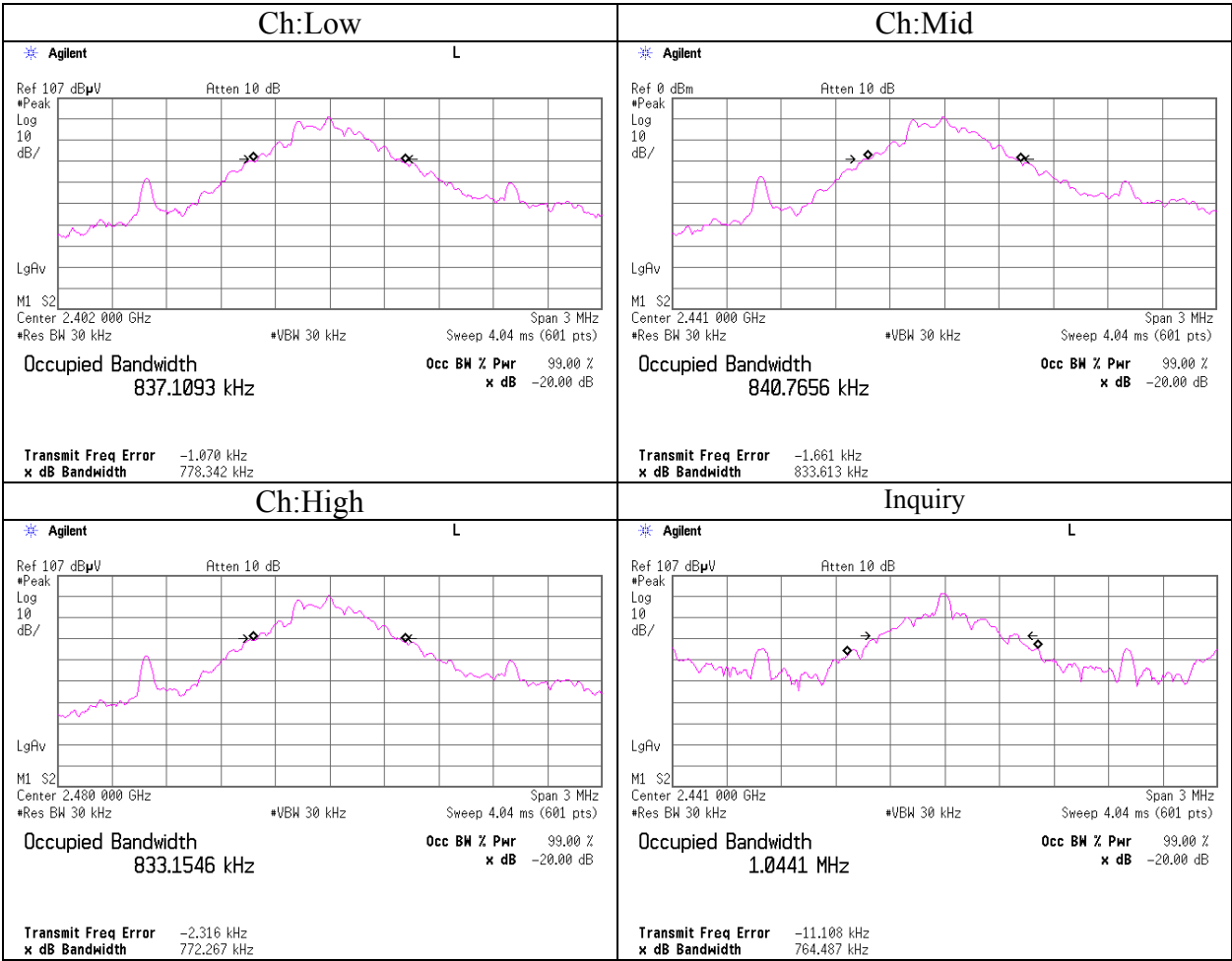
DATA OF 20dB BANDWIDTH

UL Apex Co., Ltd.
Head Office EMC Lab. No.3 Measurement Room

COMPANY	:	SATO CORPORATION	REGULATION	:	Fcc Part15 Subpart C 15.247(a)(1)
EQUIPMENT	:	Barcode Printer	TEST DISTANCE	:	-
MODEL	:	MB200i-B1	DATE	:	28/01/2005
S/ N	:	1-1 / 1-2	TEMPERATURE	:	24deg.C
POWER	:	DC5V	HUMIDITY	:	25%
MODE	:	Tx (Hopping off) / Inquiry	ENGINEER	:	Mitsuru Fujimura

Ch	Freq.	20dB Bandwidth	Limit
	[MHz]	[MHz]	[MHz]
Low	2402.0	0.778	-
Mid	2441.0	0.834	-
High	2480.0	0.772	-
Inquiry	2441.0	0.764	-

20dB Bandwidth



Number of Hopping Frequency

DATA OF NUMBER OF HOPPING FREQUENCY

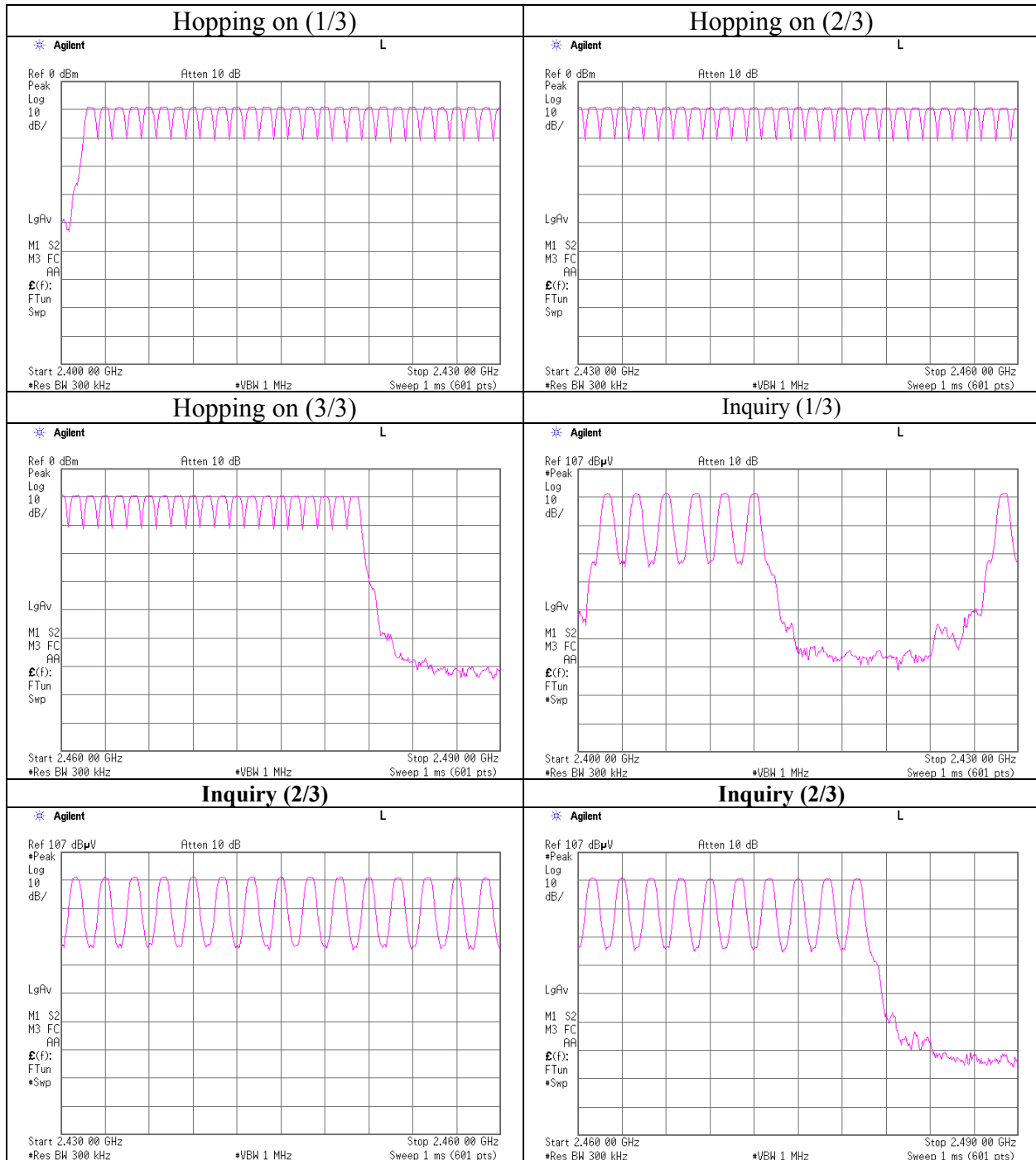
UL Apex Co., Ltd.
Head Office EMC Lab. No.3 Measurement Room

COMPANY	: SATO CORPORATION	REGULATION	: Fcc Part15 Subpart C 15.247(a)(1)(iii)
EQUIPMENT	: Barcode Printer	TEST DISTANCE	: -
MODEL	: MB200i-B1	DATE	: 28/01/2005
S/ N	: 1-1 / 1-2	TEMPERATURE	: 24deg.C
POWER	: DC5V	HUMIDITY	: 25%
MODE	: Tx (Hopping on) / Inquiry	ENGINEER	: Mitsuru Fujimura

Mode	Number of channel	Limit
	[time]	[time]
Tx(Hoppng on)	79	≥ 15

Mode	Number of channel	Limit
	[time]	[time]
Inquiry	32	≥ 15

Number of Hopping Frequency



Dwell time

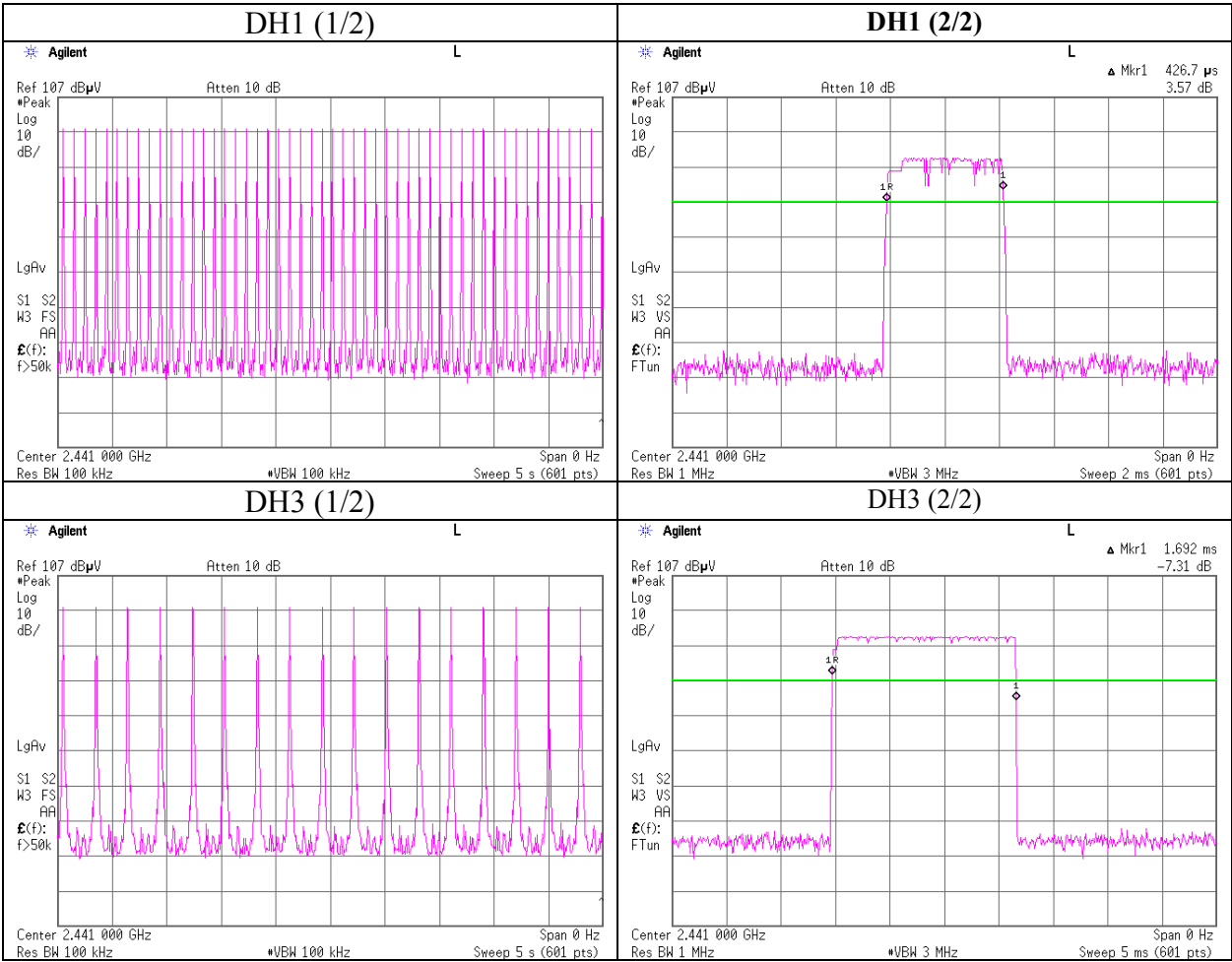
DATA OF DWELL TIME

UL Apex Co., Ltd.
Head Office EMC Lab. No.3 Measurement Room

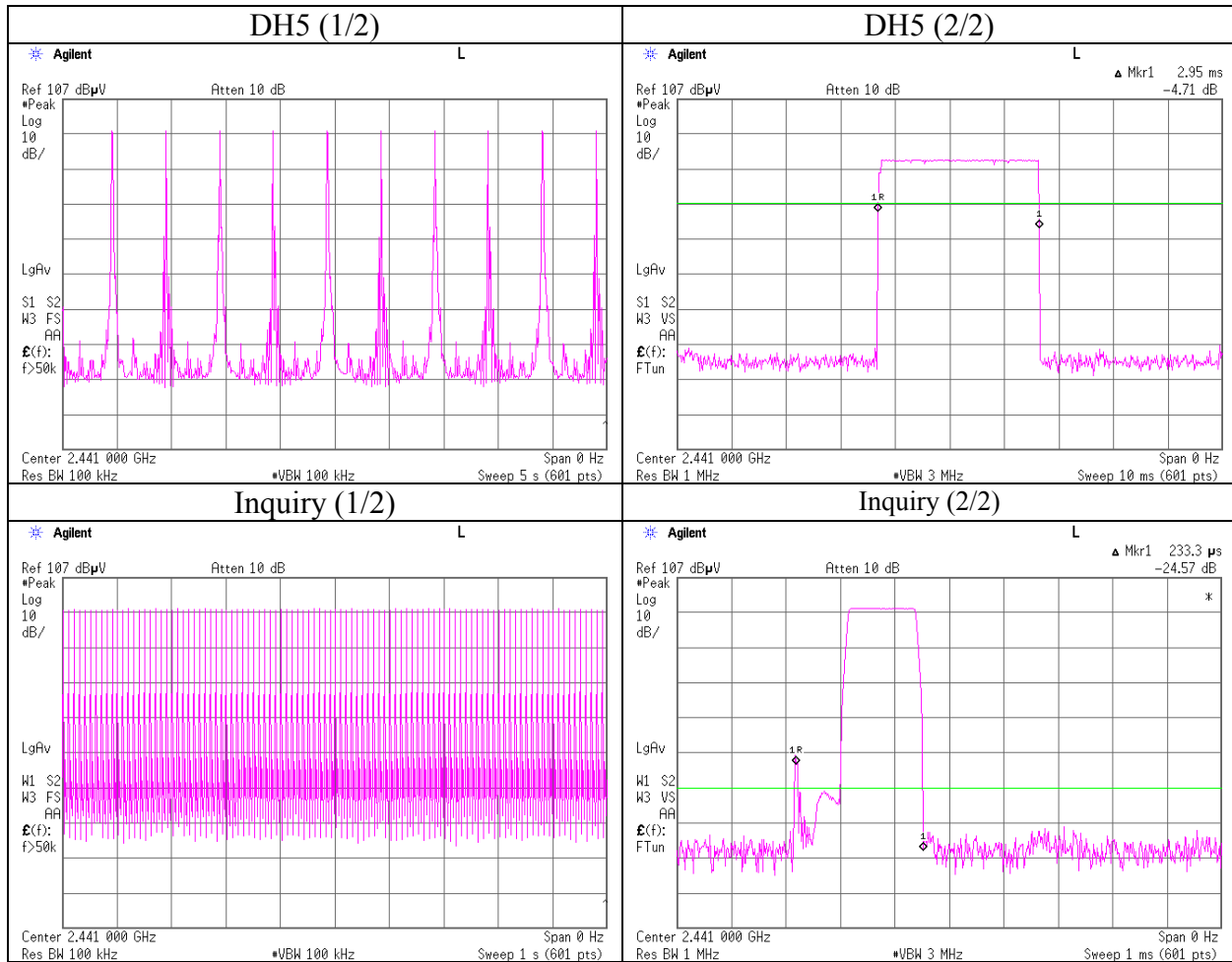
COMPANY	: SATO CORPORATION	REGULATION	: Fcc Part15 Subpart C 15.247(a)(1)
EQUIPMENT	: Barcode Printer	TEST DISTANCE	: -
MODEL	: MB200i-B1	DATE	: 28/01/2005
S/ N	: 1-1 / 1-2	TEMPERATURE	: 24deg.C
POWER	: DC5V	HUMIDITY	: 25%
MODE	: Tx (Hopping on) / Inquiry	ENGINEER	: Mitsuru Fujimura

Mode	Number of transmission in a 31.6(79 Hopping x 0.4) / 12.8(32 Hopping x 0.4)second period	Length of transmission time [msec]	Result [msec]	Limit [msec]
DH1	50 times /5sec. x 31.6 = 316 times	0.427	135	400
DH3	17 times / 5sec. x 31.6 = 107 times	1.692	181	400
DH5	10 times / 5 sec. x 31.6 = 63 times	2.950	186	400
Inquiry	100 times / 1sec. x 12.8 = 1280 times	0.233	299	400

Dwell time(FHSS)



Dwell time(FHSS)



Maximum Peak Output Power

DATA OF PEAK OUTPUT POWER(CONDUCTED)

UL Apex Co., Ltd.
Head Office EMC Lab. No.3 Measurement Room

COMPANY	: SATO CORPORATION	REGULATION	: Fcc Part15 Subpart C 15.247(b)(1)
EQUIPMENT	: Barcode Printer	TEST DISTANCE	: -
MODEL	: MB200i-B1	DATE	: 28/01/2005
S/ N	: 1-1 / 1-2	TEMPERATURE	: 24deg.C
POWER	: DC5V	HUMIDITY	: 25%
MODE	: Tx(Hopping off) / Inquiry	ENGINEER	: Mitsuru Fujimura

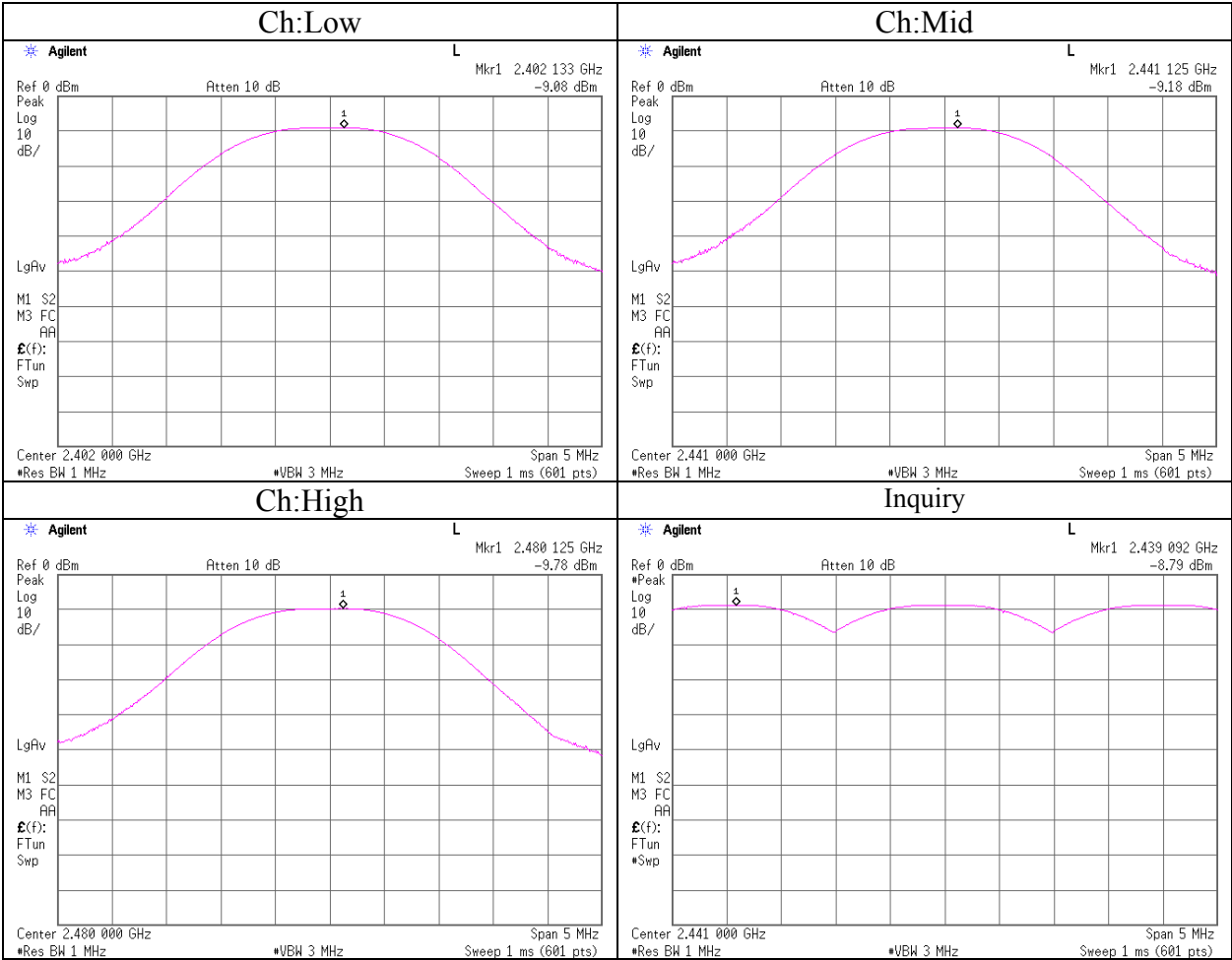
Ch	Freq. [MHz]	S/A Reading [dBm]	Cable Loss [dB]	Atten. [dB]	Result [dBm]	Limit (1W) [dBm]	Margin [dB]
Low	2402.1	-9.08	0.00	10.00	0.92	30.00	29.08
Mid	2441.1	-9.18	0.00	10.00	0.82	30.00	29.18
High	2480.1	-9.78	0.00	10.00	0.22	30.00	29.78
Inquiry	2439.1	-8.79	0.00	10.00	1.21	30.00	28.79

Sample Calculation:

Result = Reading + Cable Loss (supplied by customer)+ Attenuator

* In the above table, factor 0.0dB represents no use of Atten. and/or Filter.

Maximum Peak Output Power(FHSS)



Radiated Spurious Emission

* The result is rounded off to the second decimal place. Therefore, there may be 0.1 difference for the result.

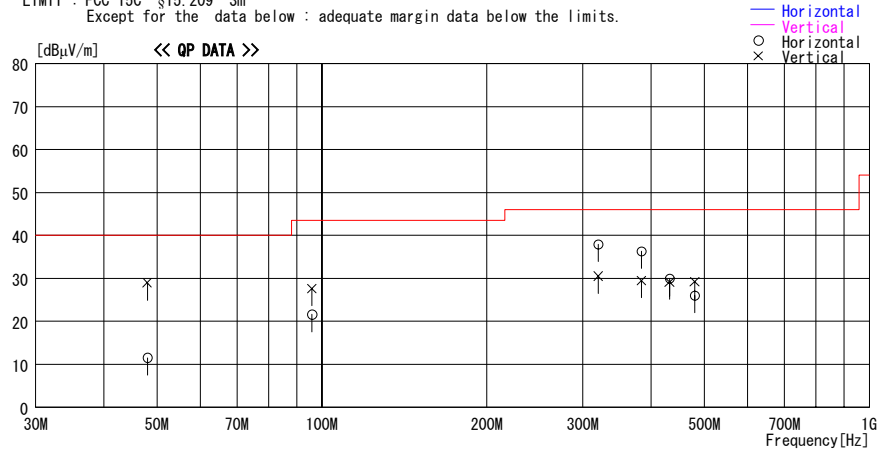
DATA OF RADIATED EMISSION TEST

UL Apex Co., Ltd. Head Office EMC Lab. No.2 Semi Anechoic Chamber
Date : 2005/01/31 23:26:46

Applicant : SATO CORPORATION
Kind of EUT : Barcode Printer
Model No. : MB2001-B1
Serial No. : 2-2
Report No. : 25EE0346-HO
Power : AC120V / 60Hz
Temp./ Humi. : 22deg. C / 27%
Operator : Makoto Kosaka

Mode / Remarks : Tx 2402MHz Hor X-axis Ver Y-axis

LIMIT : FCC 15C §15.209 3m
Except for the data below : adequate margin data below the limits.



No.	FREQ [MHz]	READING QP [dBμV]	ANT FACTOR [dB/m]	LOSS [dB]	GAIN [dB]	RESULT [dBμV/m]	LIMIT [dBμV/m]	MARGIN [dB]	ANTENNA [cm]	TABLE [DEG]
----- Horizontal -----										
1	48.000	21.9	10.7	6.6	27.7	11.5	40.0	28.5	300	168
2	96.000	32.5	9.7	7.0	27.6	21.6	43.5	21.9	300	168
3	320.026	41.0	15.6	8.2	26.9	37.9	46.0	8.1	100	331
4	384.026	37.2	18.0	8.5	27.4	36.3	46.0	9.7	100	331
5	432.000	30.2	18.7	8.8	27.8	29.9	46.0	16.1	100	331
6	480.026	26.3	18.8	8.9	28.0	26.0	46.0	20.0	100	331
----- Vertical -----										
7	48.000	39.3	10.7	6.6	27.7	28.9	40.0	11.1	100	261
8	96.000	38.5	9.7	7.0	27.6	27.6	43.5	15.9	100	261
9	320.026	33.6	15.6	8.2	26.9	30.5	46.0	15.5	100	131
10	384.026	30.4	18.0	8.5	27.4	29.5	46.0	16.5	100	131
11	432.000	29.4	18.7	8.8	27.8	29.1	46.0	16.9	100	131
12	480.026	29.5	18.8	8.9	28.0	29.2	46.0	16.8	100	131

CHART: WITH FACTOR ANT TYPE : -30MHz LOOP, 30-300MHz BICONICAL, 300MHz-1000MHz LOGPERIODIC, 1000MHz- HORN
CALCULATION: RESULT = READING + ANT FACTOR + LOSS (CABLE+ATTEN.) - GAIN (AMP)

Radiated Spurious Emission(FHSS)

* The result is rounded off to the second decimal place. Therefore, there may be 0.1 difference for the result.

DATA OF RADIATED EMISSION TEST

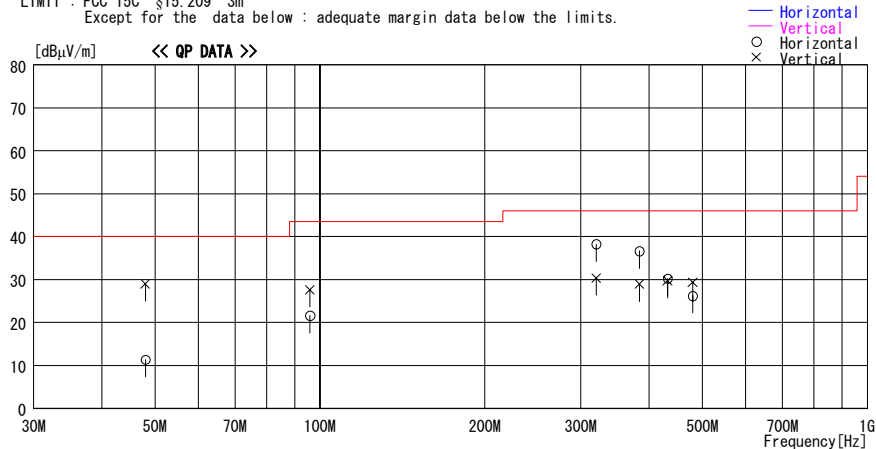
UL Apex Co., Ltd. Head Office EMC Lab. No.2 Semi Anechoic Chamber
Date : 2005/01/31 23:19:07

Applicant : SATO CORPORATION
Kind of EUT : Barcode Printer
Model No. : MB200i-B1
Serial No. : 2-2

Report No. : 25EE0346-HO
Power : AC120V / 60Hz
Temp./ Humi. : 22deg. C / 27%
Operator : Makoto Kosaka

Mode / Remarks : Tx 2441MHz Hor X-axis Ver Y-axis

LIMIT : FCC 15C §15.209 3m
Except for the data below : adequate margin data below the limits.



No.	FREQ [MHz]	READING QP [dB μ V]	ANT FACTOR [dB/m]	LOSS [dB]	GAIN [dB]	RESULT [dB μ V/m]	LIMIT [dB μ V/m]	MARGIN [dB]	ANTENNA [cm]	TABLE [DEG]
----- Horizontal -----										
1	48.000	21.7	10.7	6.6	27.7	11.3	40.0	28.7	300	354
2	96.000	32.5	9.7	7.0	27.6	21.6	43.5	21.9	300	160
3	320.060	41.3	15.6	8.2	26.9	38.2	46.0	7.8	100	44
4	384.026	37.5	18.0	8.5	27.4	36.6	46.0	9.4	100	71
5	432.000	30.5	18.7	8.8	27.8	30.2	46.0	15.8	100	46
6	480.026	26.5	18.8	8.9	28.0	26.2	46.0	19.8	100	151
----- Vertical -----										
7	48.000	39.4	10.7	6.6	27.7	29.0	40.0	11.0	100	8
8	96.000	38.5	9.7	7.0	27.6	27.6	43.5	15.9	100	297
9	320.060	33.4	15.6	8.2	26.9	30.3	46.0	15.7	100	4
10	384.026	29.8	18.0	8.5	27.4	28.9	46.0	17.1	100	210
11	432.000	30.0	18.7	8.8	27.8	29.7	46.0	16.3	100	337
12	480.026	29.6	18.8	8.9	28.0	29.3	46.0	16.7	100	309

* The result is rounded off to the second decimal place. Therefore, there may be 0.1 difference for the result.

CHART: WITH FACTOR ANT TYPE : -30MHz LOOP, 30-300MHz BICONICAL, 300MHz-1000MHz LOGPERIODIC, 1000MHz- HORN
CALCULATION: RESULT = READING + ANT FACTOR + LOSS (CABLE+ATTEN.) - GAIN (AMP)

Radiated Spurious Emission(FHSS)

* The result is rounded off to the second decimal place. Therefore, there may be 0.1 difference for the result.

DATA OF RADIATED EMISSION TEST

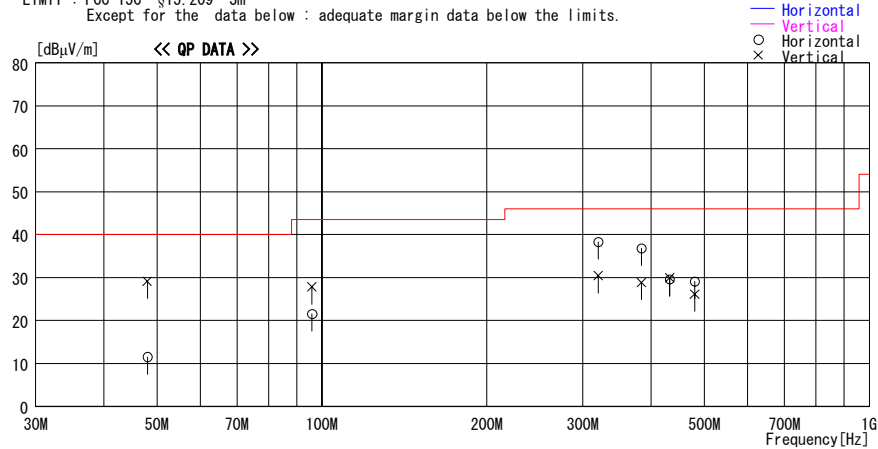
UL Apex Co., Ltd. Head Office EMC Lab. No.2 Semi Anechoic Chamber
Date : 2005/02/01 00:02:41

Applicant : SATO CORPORATION
Kind of EUT : Barcode Printer
Model No. : MB200i-B1
Serial No. : 2-2

Report No. : 25EE0346-HO
Power : AC120V / 60Hz
Temp./ Humi. : 22deg. C / 27%
Operator : Makoto Kosaka

Mode / Remarks : Tx 2480MHz Hor X-axis Ver Y-axis

LIMIT : FCC 15C §15.209 3m
Except for the data below : adequate margin data below the limits.



No.	FREQ [MHz]	READING QP [dB μ V]	ANT FACTOR [dB/m]	LOSS [dB]	GAIN [dB]	RESULT [dB μ V/m]	LIMIT [dB μ V/m]	MARGIN [dB]	ANTENNA [cm]	TABLE [DEG]
----- Horizontal -----										
1	48.000	21.9	10.7	6.6	27.7	11.5	40.0	28.5	300	353
2	96.000	32.4	9.7	7.0	27.6	21.5	43.5	22.0	300	130
3	320.026	41.4	15.6	8.2	26.9	38.3	46.0	7.7	100	71
4	384.026	37.7	18.0	8.5	27.4	36.8	46.0	9.2	100	198
5	432.026	29.9	18.7	8.8	27.8	29.6	46.0	16.4	100	228
6	480.026	29.4	18.8	8.9	28.0	29.1	46.0	16.9	100	76
----- Vertical -----										
7	48.000	39.5	10.7	6.6	27.7	29.1	40.0	10.9	100	1
8	96.000	38.7	9.7	7.0	27.6	27.8	43.5	15.7	100	279
9	320.026	33.5	15.6	8.2	26.9	30.4	46.0	15.6	100	1
10	384.026	29.7	18.0	8.5	27.4	28.8	46.0	17.2	100	228
11	432.026	30.2	18.7	8.8	27.8	29.9	46.0	16.1	100	145
12	480.026	26.4	18.8	8.9	28.0	26.1	46.0	19.9	100	228

* The result is rounded off to the second decimal place. Therefore, there may be 0.1 difference for the result.

CHART: WITH FACTOR ANT TYPE : -30MHz LOOP, 30-300MHz BICONICAL, 300MHz-1000MHz LOGPERIODIC, 1000MHz- HORN
CALCULATION: RESULT = READING + ANT FACTOR + LOSS (CABLE+ATTEN.) - GAIN (AMP)

Radiated Spurious Emission (FHSS)

* The result is rounded off to the second decimal place. Therefore, there may be 0.1 difference for the result.

UL Apex Co., Ltd.

Head Office EMC Lab. No.2 Semi Anechoic Chamber

Company : SATO CORPORATION	REPORT NO : 25EE0346-HO
Equipment : Barcode Printer	REGULATION : Fcc Part15 Subpart C 15.247(d)
Model : MB200i-B1	TEST DISTANCE : 3/1m
Sample No. : 2-2	DATE : 02/1/2005
Power : AC120V/60Hz	TEMPERATURE : 22deg.C
Mode : Bluetooth, Tx 2402MHz	HUMIDITY : 27%
Remarks : Hor X-axis/Ver Y-axis	ENGINEER : Makoto Kosaka

PK DETECT (RBW: 1MHz, VBW: 1MHz)

No.	FREQ [MHz]	S/A READING		ANT Factor [dB/m]	AMP GAIN [dB]	CABLE LOSS [dB]	Hi-Pass Filter [dB]	RESULT		Limit PK [dBuV/m]	MARGIN	
		HOR	VER					HOR	VER		HOR	VER
		[dBuV]						[dBuV/m]			[dB]	
Test distance 3meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss												
1	2390.0	43.4	43.2	31.0	39.9	5.5	0.0	40.0	39.8	74.0	34.0	34.2
2	4804.0	44.0	44.1	34.9	41.2	8.0	1.0	46.7	46.8	74.0	27.3	27.2
3	7206.0	38.7	38.6	37.6	40.4	10.0	0.4	46.3	46.2	74.0	27.7	27.8
4	9608.0	38.7	39.0	36.3	39.5	11.8	0.1	47.4	47.7	74.0	26.6	26.3
Test distance 1meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss - Dfac												
5	12010.0	41.0	41.2	41.4	39.6	13.7	0.1	47.1	47.3	74.0	26.9	26.7
6	14412.0	38.7	38.5	41.7	41.0	15.6	0.2	45.7	45.5	74.0	28.3	28.5
7	16814.0	39.7	39.7	44.7	41.7	17.1	1.1	51.4	51.4	74.0	22.6	22.6
8	19216.0	39.6	39.9	41.7	40.3	18.7	0.0	50.2	50.5	74.0	23.8	23.5
9	21618.0	40.8	40.6	40.4	35.4	19.3	0.0	55.6	55.4	74.0	18.4	18.6
10	24020.0	42.0	42.0	41.0	32.9	21.5	0.0	62.1	62.1	74.0	11.9	11.9

AV DETECT (RBW: 1MHz, VBW: 10Hz)

No.	FREQ [MHz]	S/A READING		ANT Factor [dB/m]	AMP GAIN [dB]	CABLE LOSS [dB]	Hi-Pass Filter [dB]	RESULT		Limit AV [dBuV/m]	MARGIN	
		HOR	VER					HOR	VER		HOR	VER
		[dBuV]						[dBuV/m]			[dB]	
Test distance 3meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss												
1	2390.0	33.0	33.0	31.0	39.9	5.5	0.0	29.6	29.6	54.0	24.4	24.4
2	4804.0	37.0	37.1	34.9	41.2	8.0	1.0	39.7	39.8	54.0	14.3	14.2
3	7206.0	29.0	29.1	37.6	40.4	10.0	0.4	36.6	36.7	54.0	17.4	17.3
4	9608.0	29.0	29.0	36.3	39.5	11.8	0.1	37.7	37.7	54.0	16.3	16.3
Test distance 1meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss - Dfac												
5	12010.0	28.8	28.8	41.4	39.6	13.7	0.1	34.9	34.9	54.0	19.1	19.1
6	14412.0	27.6	27.7	41.7	41.0	15.6	0.2	34.6	34.7	54.0	19.4	19.3
7	16814.0	30.3	30.1	44.7	41.7	17.1	1.1	42.0	41.8	54.0	12.0	12.2
8	19216.0	29.6	29.9	41.7	40.3	18.7	0.0	40.2	40.5	54.0	13.8	13.5
9	21618.0	30.5	30.2	40.4	35.4	19.3	0.0	45.3	45.0	54.0	8.7	9.0
10	24020.0	31.0	31.0	41.0	32.9	21.5	0.0	51.1	51.1	54.0	2.9	2.9

Test Distance 1.0m : Distance Factor(Dfac) = 20log(3/1.0) = 9.5dB

*Except for the above table : All other spurious emissions were less than 20dB for the limit.

*In the frequency over the fifth harmonic, the noise from the EUT was not seen. The data above is its base noise.

*The result is rounded off to the second decimal place. Therefore, there may be 0.1 difference for the result.

*Hi-Pass Filter was not used for factor 0.0dB of the above table.

UL Apex Co., Ltd.

Head Office EMC Lab.

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Facsimile : +81 596 24 8124

MF060b(10.04.03)

Radiated Spurious Emission (FHSS)

* The result is rounded off to the second decimal place. Therefore, there may be 0.1 difference for the result.

UL Apex Co., Ltd.

Head Office EMC Lab. No.2 Semi Anechoic Chamber

Company : SATO CORPORATION	REPORT NO : 25EE0346-HO	
Equipment : Barcode Printer	REGULATION : Fcc Part15 Subpart C 15.247(d)	
Model : MB200i-B1	TEST DISTANCE : 3/1m	
Sample No. : 2-2	DATE : 02/1/2005	
Power : AC120V/60Hz	TEMPERATURE : 22deg.C	
Mode : Bluetooth, Tx 2441MHz	HUMIDITY : 27%	
Remarks : Hor X-axis/Ver Y-axis	ENGINEER : Makoto Kosaka	

PK DETECT (RBW: 1MHz, VBW: 1MHz)

No.	FREQ [MHz]	S/A READING		ANT Factor [dB/m]	AMP GAIN [dB]	CABLE LOSS [dB]	Hi-Pass Filter [dB]	RESULT		Limit PK [dBuV/m]	MARGIN	
		HOR	VER					HOR	VER		HOR	VER
		[dBuV]						[dBuV/m]			[dB]	
Test distance 3meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss												
1	4882.0	39.7	39.5	35.3	41.2	8.0	1.0	42.8	42.6	74.0	31.2	31.4
2	7323.0	38.3	40.2	37.8	40.4	10.0	0.5	46.2	48.1	74.0	27.8	25.9
3	9764.0	38.6	39.1	36.2	39.6	12.0	0.2	47.4	47.9	74.0	26.6	26.1
Test distance 1meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss - Dfac												
4	12205.0	38.5	39.6	41.5	39.8	13.8	0.3	44.8	45.9	74.0	29.2	28.1
5	14646.0	39.9	39.3	42.2	40.9	15.8	0.2	47.7	47.1	74.0	26.3	26.9
6	17087.0	40.3	41.1	44.5	41.8	17.1	1.1	51.7	52.5	74.0	22.3	21.5
7	19528.0	40.4	39.7	41.4	39.8	18.9	0.0	51.4	50.7	74.0	22.6	23.3
8	21969.0	40.5	39.6	40.5	35.9	19.2	0.0	54.8	53.9	74.0	19.2	20.1
9	24410.0	41.0	41.0	41.1	33.8	21.6	0.0	60.4	60.4	74.0	13.6	13.6

AV DETECT (RBW: 1MHz, VBW: 10Hz)

No.	FREQ [MHz]	S/A READING		ANT Factor [dB/m]	AMP GAIN [dB]	CABLE LOSS [dB]	Hi-Pass Filter [dB]	RESULT		Limit AV [dBuV/m]	MARGIN	
		HOR	VER					HOR	VER		HOR	VER
		[dBuV]						[dBuV/m]			[dB]	
Test distance 3meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss												
1	4882.0	29.2	29.4	35.3	41.2	8.0	1.0	32.3	32.5	54.0	21.7	21.5
2	7323.0	28.5	28.8	37.8	40.4	10.0	0.5	36.4	36.7	54.0	17.6	17.3
3	9764.0	29.1	29.2	36.2	39.6	12.0	0.2	37.9	38.0	54.0	16.1	16.0
Test distance 1meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss - Dfac												
4	12205.0	28.7	28.7	41.5	39.8	13.8	0.3	35.0	35.0	54.0	19.0	19.0
5	14646.0	27.4	27.4	42.2	40.9	15.8	0.2	35.2	35.2	54.0	18.8	18.8
6	17087.0	30.0	29.9	44.5	41.8	17.1	1.1	41.4	41.3	54.0	12.6	12.7
7	19528.0	29.8	29.4	41.4	39.8	18.9	0.0	40.8	40.4	54.0	13.2	13.6
8	21969.0	29.9	30.1	40.5	35.9	19.2	0.0	44.2	44.4	54.0	9.8	9.6
9	24410.0	31.0	31.0	41.1	33.8	21.6	0.0	50.4	50.4	54.0	3.6	3.6

Test Distance 1.0m : Distance Factor(Dfac) = 20log(3/1.0) = 9.5dB

*Except for the above table : All other spurious emissions were less than 20dB for the limit.

*In the frequency over the fifth harmonic, the noise from the EUT was not seen. The data above is its base noise.

*The result is rounded off to the second decimal place. Therefore, there may be 0.1 difference for the result.

*Hi-Pass Filter was not used for factor 0.0dB of the above table.

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MF060b(10.04.03)

Radiated Spurious Emission (FHSS)

* The result is rounded off to the second decimal place. Therefore, there may be 0.1 difference for the result.

UL Apex Co., Ltd.
Head Office EMC Lab. No.2 Semi Anechoic Chamber

Company : SATO CORPORATION	REPORT NO : 25EE0346-HO	
Equipment : Barcode Printer	REGULATION : Fcc Part15 Subpart C 15.247(d)	
Model : MB200i-B1	TEST DISTANCE : 3/1m	
Sample No. : 2-2	DATE : 02/1/2005	
Power : AC120V/60Hz	TEMPERATURE : 22deg.C	
Mode : Bluetooth, Tx 2480MHz	HUMIDITY : 27%	
Remarks : Hor X-axis/Ver X-axis	ENGINEER : Makoto Kosaka	

PK DETECT (RBW: 1MHz, VBW: 1MHz)

No.	FREQ	S/A READING		ANT Factor	AMP GAIN	CABLE LOSS	Hi-Pass Filter	RESULT		Limit PK	MARGIN	
		HOR	VER					HOR	VER		HOR	VER
	[MHz]	[dBuV]		[dB/m]	[dB]	[dB]	[dB]	[dBuV/m]		[dBuV/m]	[dB]	
Test distance 3meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss												
1	2483.5	54.9	51.4	30.8	40.0	5.5	0.0	51.2	47.7	74.0	22.8	26.3
2	4960.0	43.4	41.1	35.8	41.3	8.1	1.1	47.1	44.8	74.0	26.9	29.2
3	7440.0	39.6	38.8	37.9	40.3	10.2	0.7	48.1	47.3	74.0	25.9	26.7
4	9920.0	40.8	39.9	36.2	39.6	12.1	0.3	49.8	48.9	74.0	24.2	25.1
Test distance 1meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss - Dfac												
5	12400.0	39.1	39.1	41.6	40.0	14.0	0.4	45.6	45.6	74.0	28.4	28.4
6	14880.0	38.6	38.2	42.6	40.9	15.9	0.5	47.2	46.8	74.0	26.8	27.2
7	17360.0	40.4	41.0	44.4	41.6	17.2	0.9	51.8	52.4	74.0	22.2	21.6
8	19840.0	40.7	40.4	41.1	39.4	19.3	0.0	52.2	51.9	74.0	21.8	22.1
9	22320.0	39.3	41.1	40.4	35.3	19.6	0.0	54.5	56.3	74.0	19.5	17.7
10	24800.0	40.5	41.0	41.1	34.6	21.5	0.0	59.0	59.5	74.0	15.0	14.5

AV DETECT (RBW: 1MHz, VBW: 10Hz)

No.	FREQ	S/A READING		ANT Factor	AMP GAIN	CABLE LOSS	Hi-Pass Filter	RESULT		Limit AV	MARGIN	
		HOR	VER					HOR	VER		HOR	VER
	[MHz]	[dBuV]		[dB/m]	[dB]	[dB]	[dB]	[dBuV/m]		[dBuV/m]	[dB]	
Test distance 3meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss												
1	2483.5	54.4	50.8	30.8	40.0	5.5	0.0	50.7	47.1	54.0	3.3	6.9
2	4960.0	35.3	31.7	35.8	41.3	8.1	1.1	39.0	35.4	54.0	15.0	18.6
3	7440.0	28.9	29.0	37.9	40.3	10.2	0.7	37.4	37.5	54.0	16.6	16.5
4	9920.0	29.7	29.6	36.2	39.6	12.1	0.3	38.7	38.6	54.0	15.3	15.4
Test distance 1meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss - Dfac												
5	12400.0	29.0	28.8	41.6	40.0	14.0	0.4	35.5	35.3	54.0	18.5	18.7
6	14880.0	28.0	27.8	42.6	40.9	15.9	0.5	36.6	36.4	54.0	17.4	17.6
7	17360.0	29.8	29.8	44.4	41.6	17.2	0.9	41.2	41.2	54.0	12.8	12.8
8	19840.0	29.9	29.5	41.1	39.4	19.3	0.0	41.4	41.0	54.0	12.6	13.0
9	22320.0	30.5	30.4	40.4	35.3	19.6	0.0	45.7	45.6	54.0	8.3	8.4
10	24800.0	30.9	30.9	41.1	34.6	21.5	0.0	49.4	49.4	54.0	4.6	4.6

Test Distance 1.0m : Distance Factor(Dfac) = 20log(3/1.0) = 9.5dB

*Except for the above table : All other spurious emissions were less than 20dB for the limit.

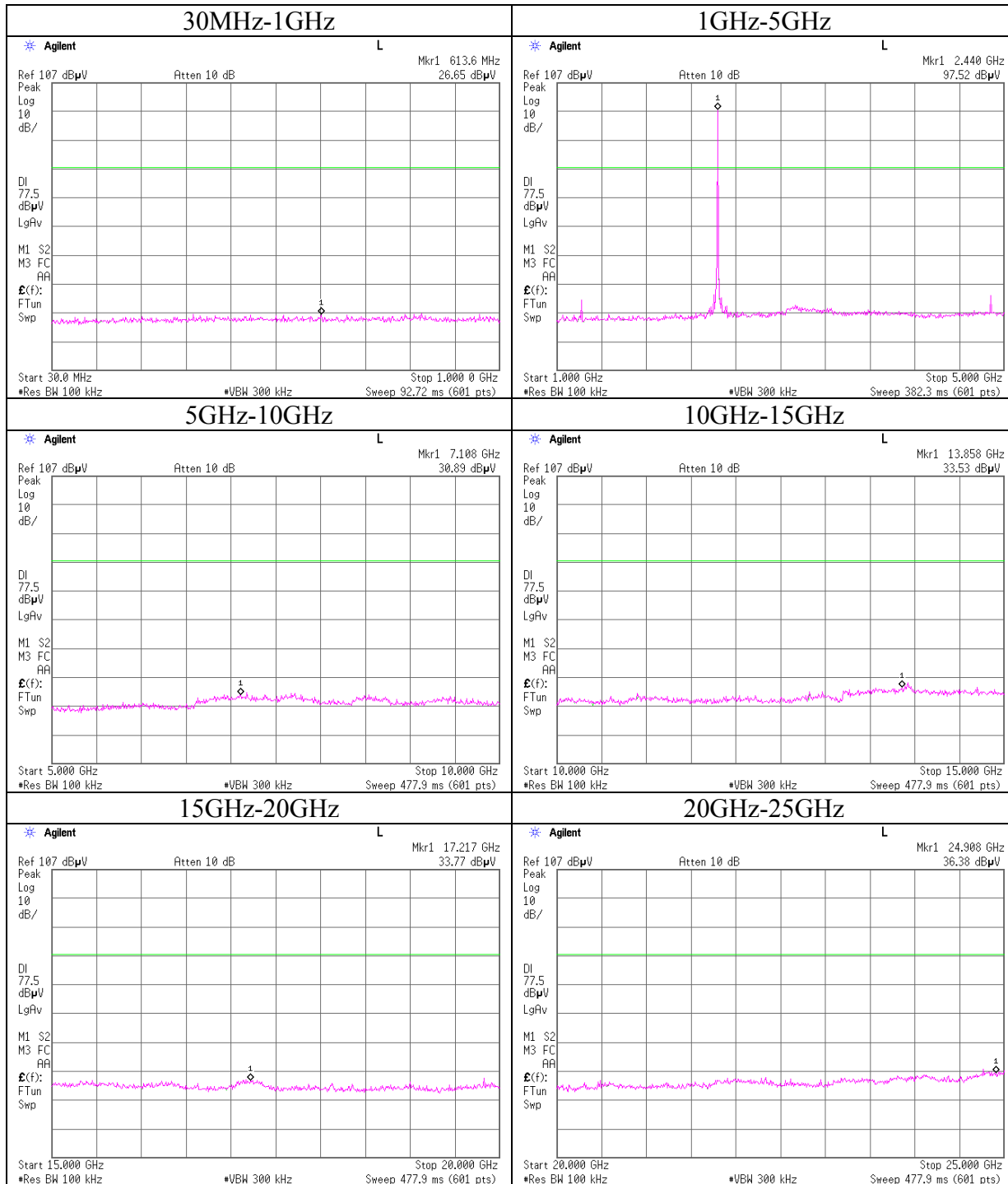
*In the frequency over the fifth harmonic, the noise from the EUT was not seen. The data above is its base noise.

*The result is rounded off to the second decimal place. Therefore, there may be 0.1 difference for the result.

*Hi-Pass Filter was not used for factor 0.0dB of the above table.

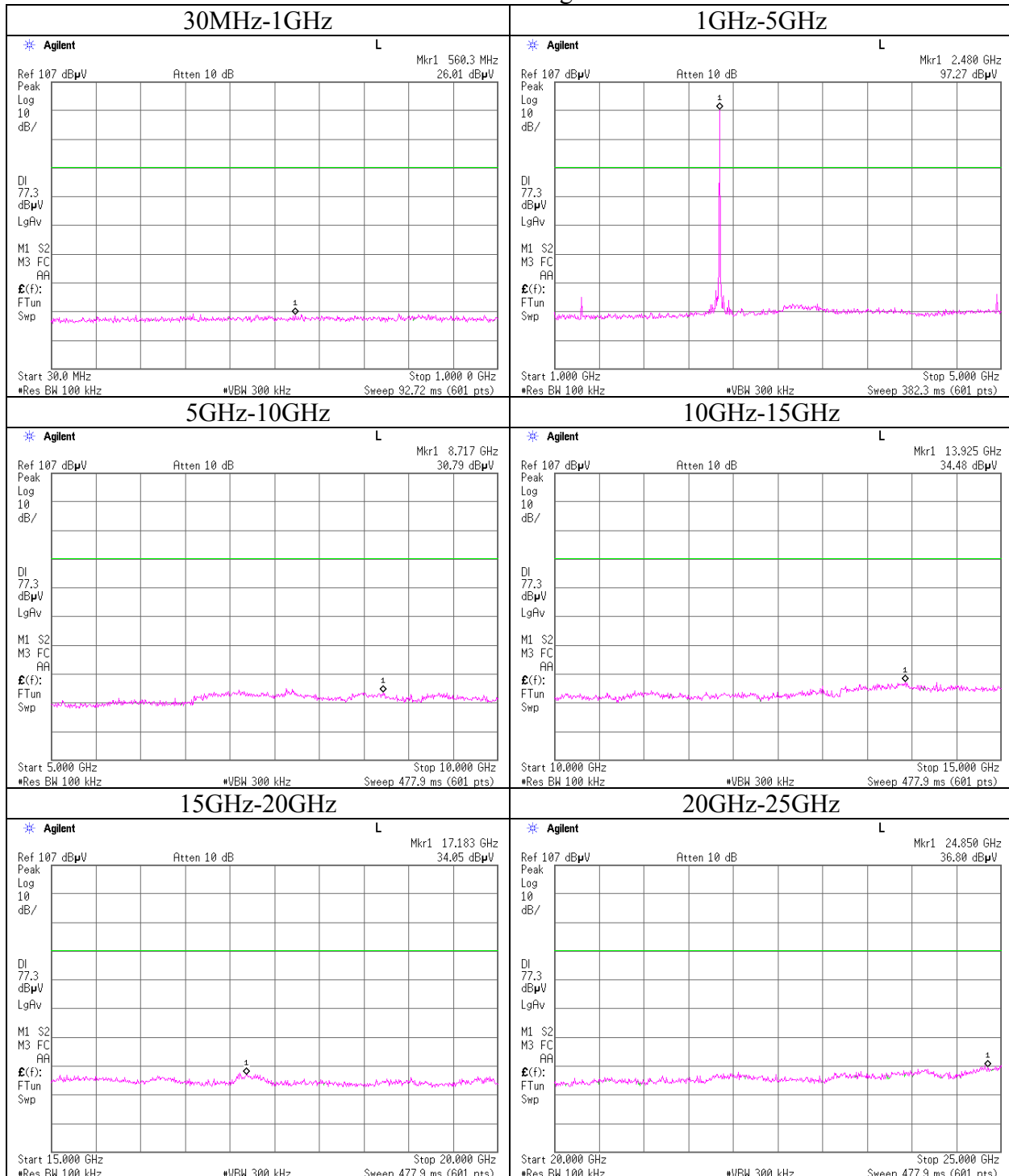
Conducted Spurious Emission (FHSS)

Ch:Mid

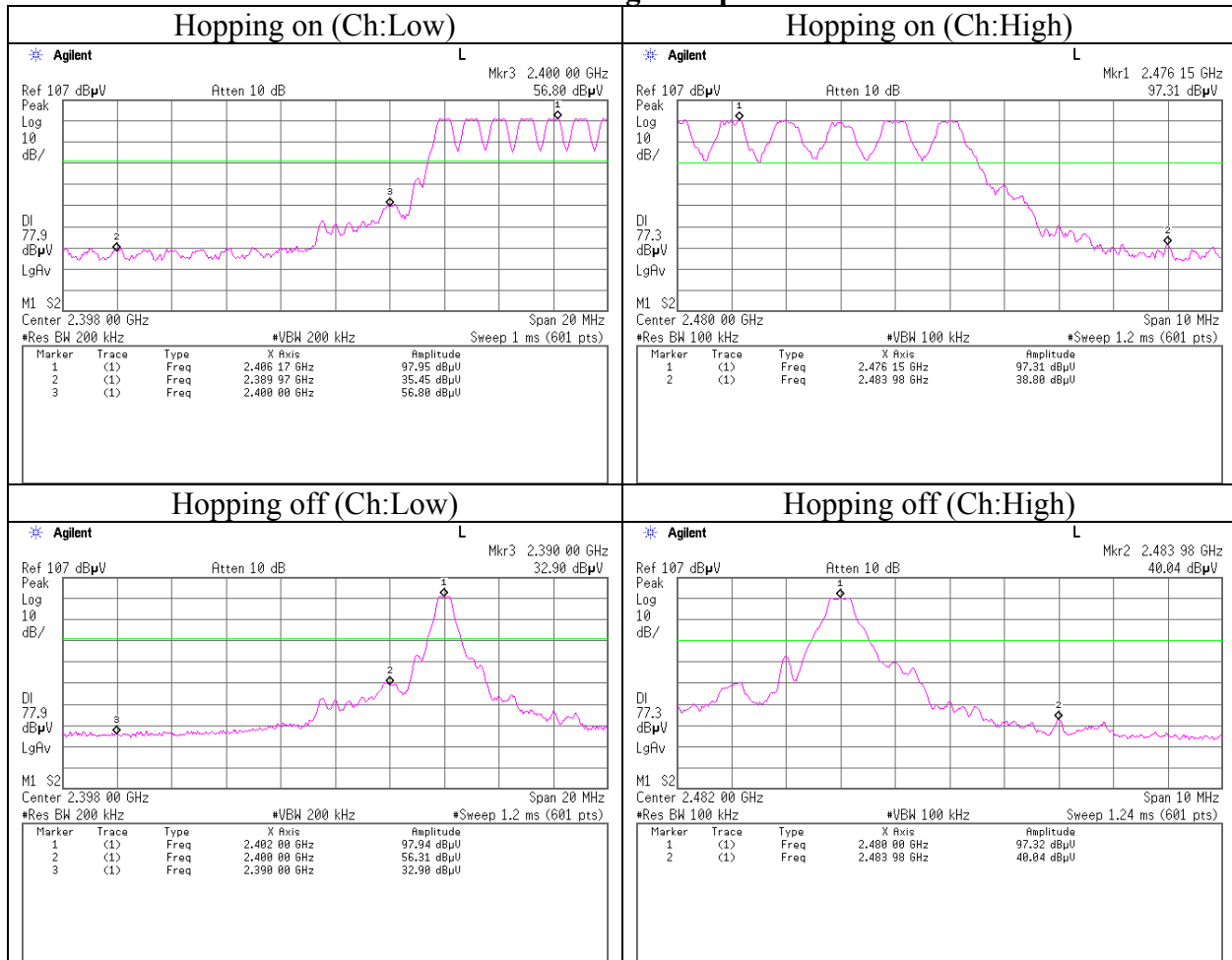


Conducted Spurious Emission (FHSS)

Ch:High



Conducted Spurious Emission (FHSS)
Band Edge compliance



99% Occupied Bandwidth

