

EMI TEST REPORT

Test Report No. : 25DE0238-HO

Applicant : NIPPON ALEPH CORP.
Type of Equipment : Outdoor Dual Technology Detector
Model No. : XC-1XT
Test standard : FCC Part 15 2004
Subpart C Section 15.209, Section 15.245
FCC ID : DNHXC-001-XT
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:

December 7, 9 and 10, 2004

Tested by:



Yutaka Yoshida
EMC Service



Kenichi Adachi
EMC Service

Approved by :



Naoki Sakamoto
Group Leader of
EMC Service

UL Apex Co., Ltd.

Head Office EMC Lab.

4383-326 Asama-cho, Ise-shi, Mie-ken 516-0021 JAPAN

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MF060b(10.04.03)

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SECTION 1: Client information

Company Name	:	NIPPON ALEPH CORP.
Address	:	1-28-52 Komaoka, Turumi-ku, Yokohama-shi, Kanagawa-ken, 230-0071, Japan
Telephone Number	:	+81-45-575-1197
Facsimile Number	:	+81-45-580-1679
Contact Person	:	Junichi Takada

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

2.1 Identification of E.U.T.

Type of Equipment	:	Outdoor Dual Technology Detector
Model No.	:	XC-1XT
Serial No.	:	1
Rating	:	DC12V (DC 9.5V to 16V)
Country of Manufacture	:	Japan
Receipt Date of Sample	:	December 6, 2004
Condition of EUT	:	Production model

2.2 Product Description

Model No: XC-1XT is the Outdoor Dual Technology Detector.
The clock frequency of EUT is 4MHz (CPU).

Equipment Type	:	Transmitter
Frequency operation	:	10.525GHz
Type of modulation	:	Pulse Modulation
Mode of operation	:	Simplex
Antenna Type	:	Patch Antenna
Antenna Gain	:	13dBi
Operating Voltage (Inner)	:	DC 5.0V +/-0.2V
Temperature of operation	:	-30 deg.C. to 55 deg.C.

FCC 15.31 (e)

This EUT provides stable voltage(Inner DC5.0V) 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 Part 15 Subpart C 2004
Title : FCC 47CFR Part15 Radio Frequency Device Subpart C Intentional Radiators
Section 15.245 Operation within the bands 902 – 928MHz, 2435 – 2465MHz,
5785 – 5815MHz, 10500 – 10550MHz, and 24075 – 24175MHz.
Remarks: The full port test filled all available ports was performed
at the FCC part 15B. (Verification)

3.2 Procedures and results

No.	Item	Test Procedure	Specification	Deviation	Worst margin *0)	Results
1	Electric Field Strength of Fundamental Emission	ANSI C63.4:2003 13. Measurement of intentional radiators	Section 15.245(b)	N/A	38.7dB (PK) 87.4dB (AV) 10522.290MHz Horizontal	Complied
3	Electric Field Strength of Spurious Emission	ANSI C63.4:2003 13. Measurement of intentional radiators	Section 15.205 Section 15.209 Section 15.245(b)	N/A	7.1dB (PK) 31564.62MHz Vertical 20.0dB (AV) 42087.33MHz Vertical	Complied
4	-20dB Bandwidth	ANSI C63.4:2003 13. Measurement of intentional radiators	Section 15.215(c)	N/A	-	Complied

*Note: UL Apex's EMI Work Procedure QPM05.
*0) The result is rounded off to the second decimal place. Therefore, there may be 0.1 difference for the result.

3.3 Addition to standards

No.	Item	Test Procedure	Specification	Remarks	Deviation	Worst margin	Results
1	99% Occupied Band Width	RSS210(issue 5): 2001 + Amendment:2002 + Amendment2:2003 + Amendment3:2004	RSS210(issue 5): 2001 + Amendment:2002 + Amendment2:2003 + Amendment3:2004	Radiated	N/A	N/A	N/A

3.4 Uncertainty

Radiated Emission Test

The measurement uncertainty (with a 95% confidence level) for this test using Biconical antenna is ± 4.5 dB.

The measurement uncertainty (with a 95% confidence level) for this test using Logperiodic antenna is ± 5.2 dB.

The measurement uncertainty (with a 95% confidence level) for this test using Horn Antenna is ± 6.6 dB.

* The data listed in this test report has enough margin, more than site margin.

3.5 Test Location

UL Apex Co., Ltd. Head Office EMC Lab. *NVLAP Lab. code: 200572-0

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	Listed date (for NVLAP)	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 measurement room.

3.6 Test set up, Test instruments and Data of EMI

Refer to APPENDIX 1 to 3.

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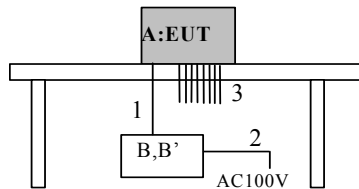
SECTION 4: Operation of E.U.T. during testing

4.1 Operating Modes

The mode is used : Transmitting mode

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

4.2 Configuration and peripherals



* 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	Outdoor Dual Technology Detector	XC-1XT	1	NIPPON ALEPH CORP.	DNHXC-001-XT	-
B	DC power supply	6642A	MY40000358	Agilent Technology	-	(Above 1GHz)
B'	DC power supply	PMC35-2A	13090501	Kikusui	-	(Below 1GHz)

List of cables used

No.	Name	Length (m)	Shield	Backshell Material
1	DC Cable	2.2	N	Polyvinyl chloride
2	AC Cable	2	N	Polyvinyl chloride
3	Signal Cable (0.5m x 8 lines)	0.5	N	Polyvinyl chloride

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SECTION 5: Radiated emission (Fundamental and Spurious Emission)

5.1 Operating environment

Test place : No.2 semi anechoic chamber.
Temperature : See data
Humidity : See data

5.2 Test configuration

EUT was placed on a platform of table size (0.5m x 1.0m x 0.8m) on the conducting ground plane.

The EUT was set on the center of the tabletop.

Test was made with the antenna positioned in both the horizontal and vertical planes of polarization. The measurement antenna varied in height above the conducting ground plane to obtain the maximum signal strength.

A drawing of the set up is shown in the photos of APPENDIX 1.

5.3 Test conditions

Frequency range : 30MHz-10000MHz, 10000MHz-26500MHz, 26500MHz-40000MHz, 50000MHz-53000MHz
Test distance : 3m , 1m , 0.5m , 0.05m
EUT position : Tabletop
EUT operation mode : Transmitting

5.4 Test procedure

The measuring antenna height 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.

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

- 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.

5.5 Results

Summary of the test results: Pass

Date: December 7, 9 and 10, 2004

Tested by: Kenichi Adachi, and Yutaka Yoshida

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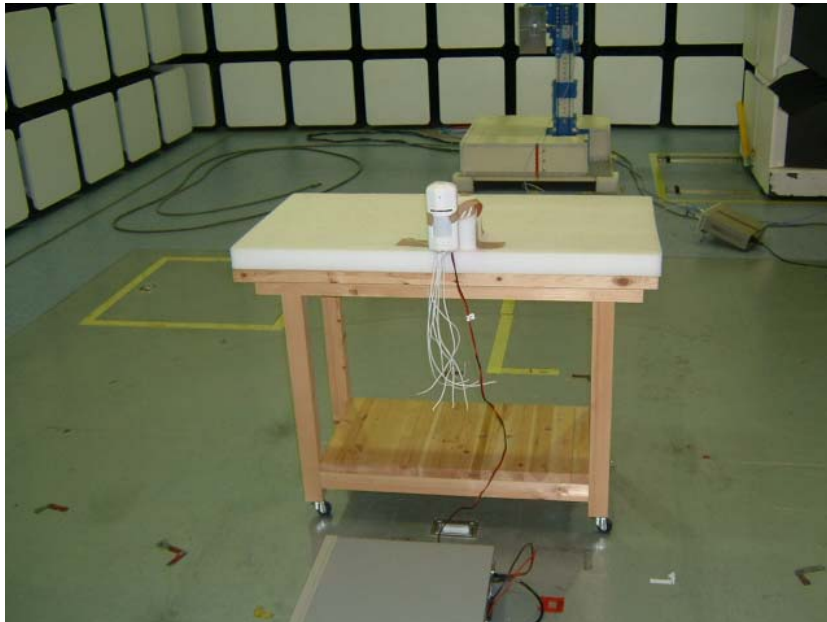
APPENDIX 1: Photographs of test setup

Radiated emission

Front

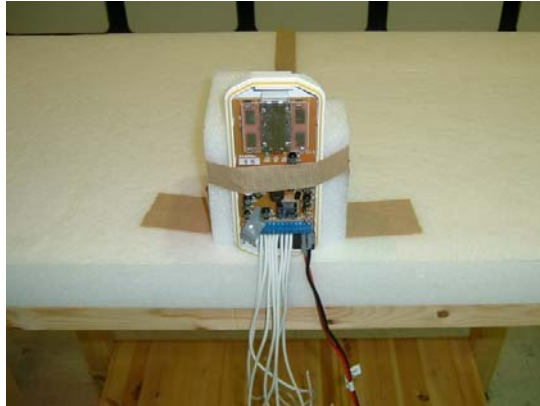


Rear

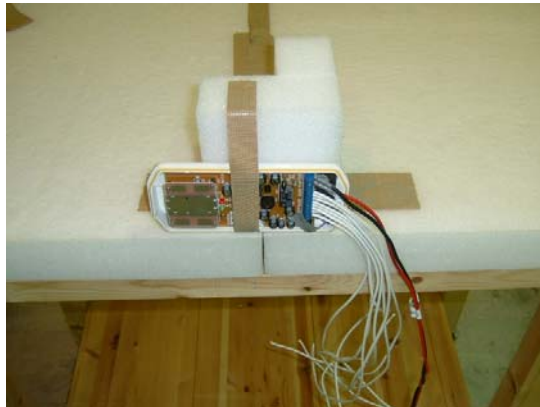


Worst Case Position (Horizontal : X-axis/ Vertical: Y-axis)

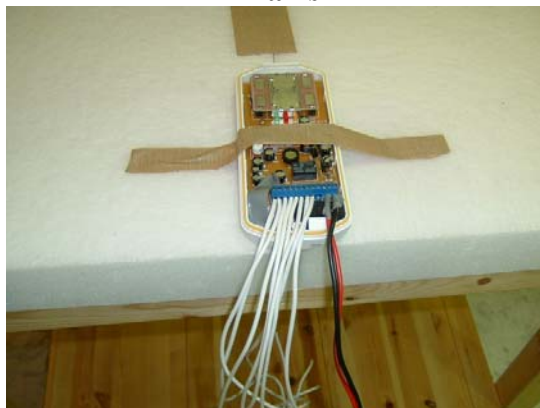
X-axis



Y-axis



Z-axis



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	1,2,3,4	2004/04/12 * 12
MTR-02	Test Receiver	Rohde & Schwarz	ESCS30	2	2004/02/03 * 12
MRENT-09	Spectrum Analyzer	Advantest	R3273	1,2,3,4	2004/02/18 * 12
MCC-04	Microwave Cable	Storm	421-011	1,2,3,4	2004/01/06 * 12
MPA-01	Pre Amplifier	Agilent	8449B	1,2,3,4	2004/02/06 * 12
MCC-29	Microwave Cable	Suhner	SUCOFLEX101	1,2,3,4	2004/08/26 * 12
MHA-06	Horn Antenna	Schwarzbeck	BBHA9120D	1,2,3,4	2004/01/10 * 12
MHA-02	Horn Antenna	EMCO	3160-09	2	2004/01/10 * 12
MSA-03	Spectrum Analyzer	Agilent	E4448A	2	2004/06/12 * 12
MCC-27	Microwave Cable	SUHNER	SUCOFLEX101	2	2004/08/26 * 12
MPA-03	Microwave System Power Amplifier	Agilent	83050A	2	2004/06/12 * 12
MCC-28	Microwave Cable	SUHNER	SUCOFLEX101	2	2004/08/26 * 12
MHA-04	Horn Antenna	EMCO	3160-10	2	2004/01/10 * 12
MPA-07 Gain25	Pre Amplifier	UNITEK ELECTROBICS INC.	AmplG	2	2004/10/10 * 12
MCC-32	coaxial cable	ULApex	-	2	2004/06/12 * 12
MDPS-01	DC Power Supply	Agilent	6642A	1,2	Pre Check
MBA-02	Biconical Antenna	Schwarzbeck	BBA9106	2	2004/10/14 * 12
MLA-02	Logperiodic Antenna	Schwarzbeck	USLP9143	2	2004/10/14 * 12
MCC-12	Coaxial Cable	Fujikura/Agilent	-	2	2004/02/24 * 12
MAT-07	Attenuator(6dB)	Weinschel Corp	2	2	2003/12/16 * 12
MPA-06	Pre Amplifier	Hewlett Packard	8447D	2	2004/08/29 * 12
MDPS-03	DC Power Supply	Kikusui	PMC35-2A	2,3,4	Pre Check
MHA-10	Horn Antenna	Wise Wave	ARH1523-02	2	Pre Check
MMX-01	Preselected Millimeter Mixer	Agilent	11974V	2	Pre Check
MHA-07	Horn Antenna	Custom Microwave	HO22R	2	Pre Check

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

Test Item:

- 1: Fundamental Emission**
- 2: Spurious Emission**
- 3: 20dB Bandwidth**
- 4: 99% Occupied Bandwidth**

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APPENDIX 3: Data of EMI test

Radiated Emission (Fundamental and Spurious Emission)

DATA OF RADIATED EMISSION TEST

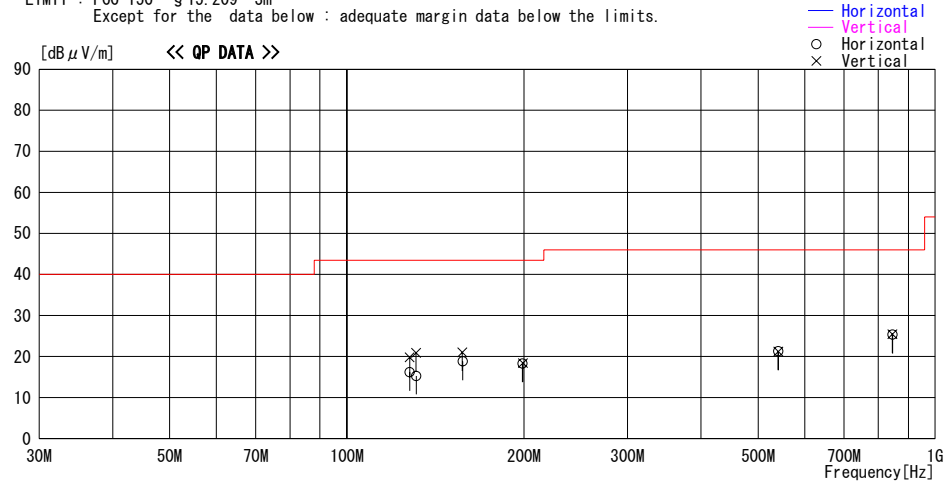
UL Apex Co., Ltd. Head Office EMC Lab. No.2 Semi Anechoic Chamber
Date : 2004/12/09 22:59:43

Applicant : NIPPON ALEPH CORP.
Kind of EUT : Outdoor Dual Technology Detector
Model No. : XC-1XT
Serial No. : 1
Report No. : 25DE0238-HO
Power : DC 12.0V
Temp./Humi. : 25deg. C / 35%
Operator : Yutaka Yoshida

Mode / Remarks : Transmitting / EUT Max-axis (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	127.796	22.5	13.7	7.4	27.4	16.2	43.5	27.3	256	311
2	131.115	21.4	13.9	7.4	27.4	15.3	43.5	28.2	100	360
3	157.288	22.0	16.5	7.6	27.3	18.8	43.5	24.7	100	0
4	198.773	20.5	17.1	7.8	27.1	18.3	43.5	25.2	100	360
5	540.774	20.8	19.2	9.5	28.2	21.3	46.0	24.7	100	360
6	845.992	20.5	22.0	10.6	27.8	25.3	46.0	20.7	100	360
----- Vertical -----										
7	127.795	26.1	13.7	7.4	27.4	19.8	43.5	23.7	100	12
8	131.073	27.0	13.9	7.4	27.4	20.9	43.5	22.6	100	113
9	157.039	24.2	16.5	7.6	27.3	21.0	43.5	22.5	264	360
10	199.227	20.6	17.1	7.8	27.1	18.4	43.5	25.1	138	0
11	540.852	20.7	19.2	9.5	28.2	21.2	46.0	24.8	100	0
12	845.291	20.6	22.0	10.6	27.8	25.4	46.0	20.6	100	0

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

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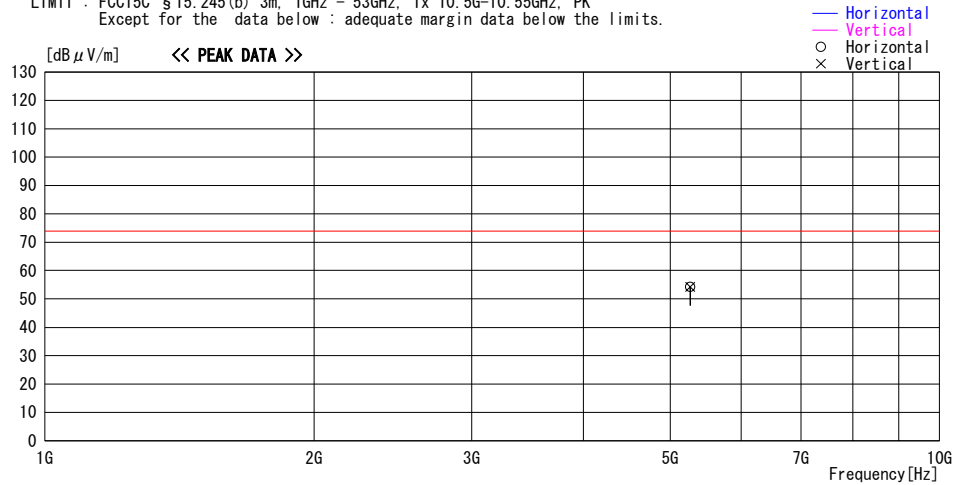
Radiated Emission DATA OF RADIATED EMISSION TEST

UL Apex Co., Ltd. Head Office EMC Lab. No.2 Semi Anechoic Chamber
Date : 2004/12/07 11:32:12

Applicant : NIPPON ALEPH CORP. Report No. : 25DE0238-HO
Kind of EUT : Outdoor Dual Technology Detector Power : DC 12.0V
Model No. : XC-1XT Temp./Humi. : 21deg. C / 34%
Serial No. : 1 Operator : Kenichi Adachi

Mode / Remarks : Transmitting / EUT Max-axis (Hor. : X-axis, Ver. : Y-axis)

LIMIT : FCC15C §15.245(b) 3m, 1GHz - 53GHz, Tx 10.5G-10.55GHz, PK
Except for the data below : adequate margin data below the limits.



Frequency	Reading	DET	Antenna	Loss&	Level	Angle	Height	Polar.	Limit	Margin
			Factor	Gain						
[MHz]	[dB μ V]		[dB/m]	[dB]	[dB μ V/m]	[Deg]	[cm]		[dB μ V/m]	[dB]
5262.500	43.2	PK	36.2	-25.2	54.2	0	100	Hori.	73.9	19.7
5262.500	43.2	PK	36.2	-25.2	54.2	0	100	Vert.	73.9	19.7

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

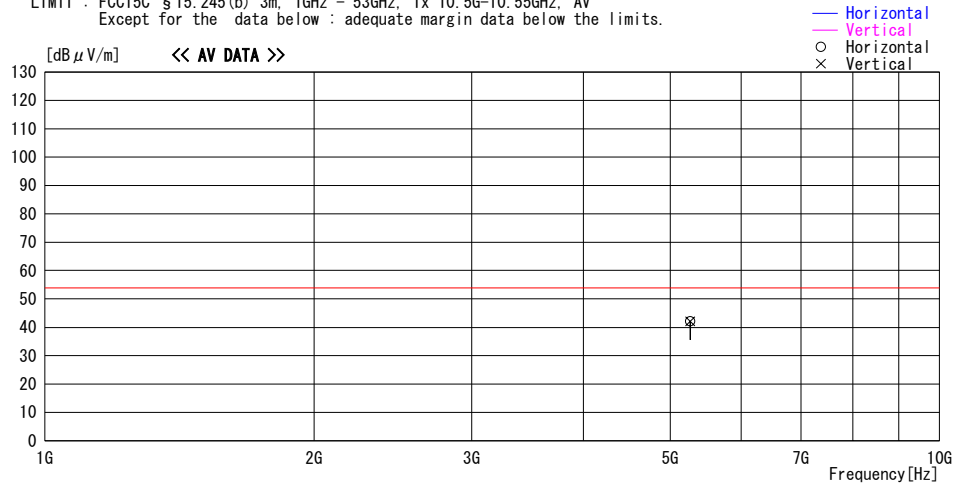
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Frequency	Reading	DET	Antenna	Loss &	Level	Angle	Height	Polar.	Limit	Margin
			Factor	Gain						
[MHz]	[dBuV]		[dB/m]	[dB]	[dBuV/m]	[Deg]	[cm]		[dBuV/m]	[dB]
5262.500	31.1	AV	36.2	-25.2	42.1	0	100	Hori.	53.9	11.8
5262.500	31.1	AV	36.2	-25.2	42.1	0	100	Vert.	53.9	11.8

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

Radiated Emission

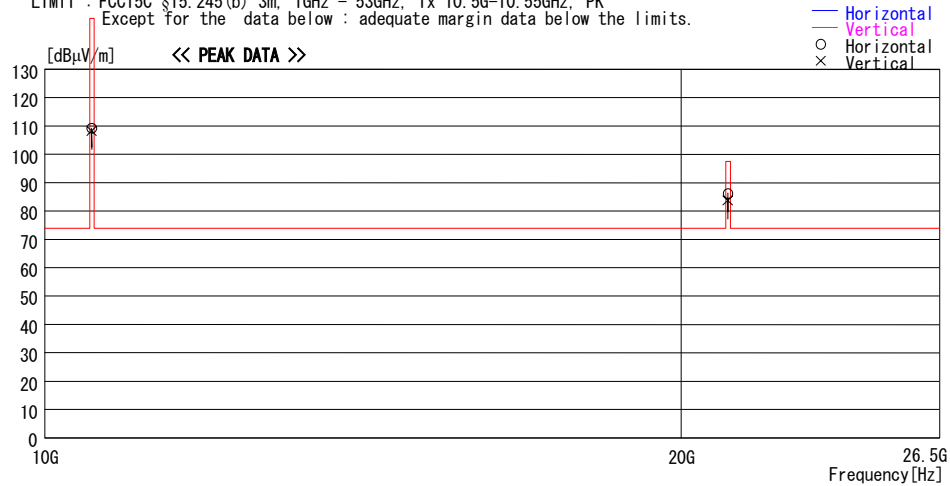
DATA OF RADIATED EMISSION TEST

UL Apex Co., Ltd. Head Office EMC Lab. No.2 Semi Anechoic Chamber
Date : 2004/12/07 12:05:25

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LIMIT : FCC15C §15.245(b) 3m, 1GHz - 53GHz, Tx 10.5G-10.55GHz, PK
Except for the data below : adequate margin data below the limits.



Frequency [MHz]	Reading [dBμV]	DET	Antenna	Loss&	Level [dBμV/m]	Angle [Deg]	Height [cm]	Polar.	Limit	Margin	
			Factor [dB/m]	Gain [dB]					[dBμV/m]	[dB]	
10522.290	102.4	PK	37.7	-30.9	109.2	141	100	Hori.	147.9	38.7	(Carrier)
10522.300	101.4	PK	37.7	-30.9	108.2	169	100	Vert.	147.9	39.7	(Carrier)
21044.600	71.5	PK	40.4	-25.6	86.3	174	100	Hori.	97.5	11.2	
21044.710	68.9	PK	40.4	-25.6	83.7	170	118	Vert.	97.5	13.8	

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

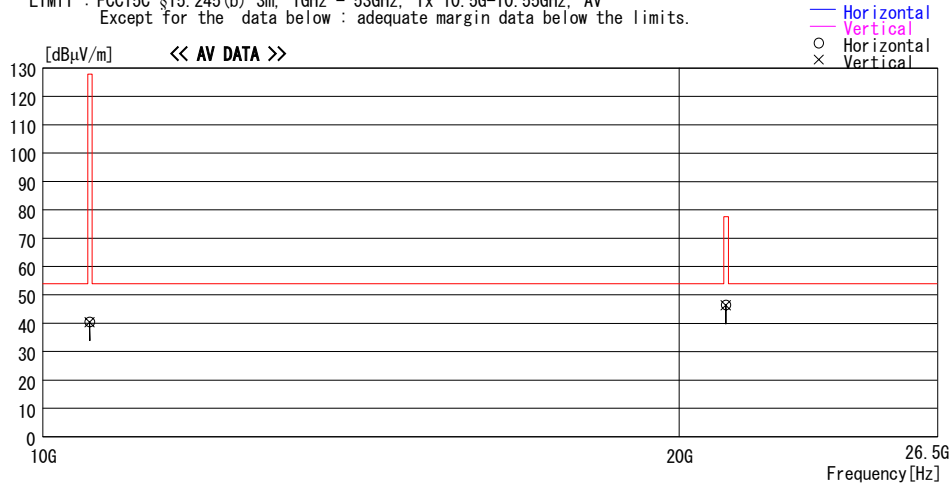
Radiated Emission DATA OF RADIATED EMISSION TEST

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Serial No. : 1 Operator : Kenichi Adachi

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[MHz]	[dBμV]		[dB/m]	[dB]	[dBμV/m]	[Deg]	[cm]		[dBμV/m]	[dB]
10522.290	33.7	AV	37.7	-30.9	40.5	141	100	Hori.	127.9	87.4
10522.300	33.7	AV	37.7	-30.9	40.5	169	100	Vert.	127.9	87.4
21044.600	31.7	AV	40.4	-25.6	46.5	174	100	Hori.	77.5	31.0
21044.710	31.5	AV	40.4	-25.6	46.3	170	118	Vert.	77.5	31.2

(Carrier)
(Carrier)

CHART: WITH FACTOR ANT TYPE : -30MHz LOOP, 30-300MHz BICONICAL, 300MHz-1000MHz LOGPERIODIC, 1000MHz- HORN
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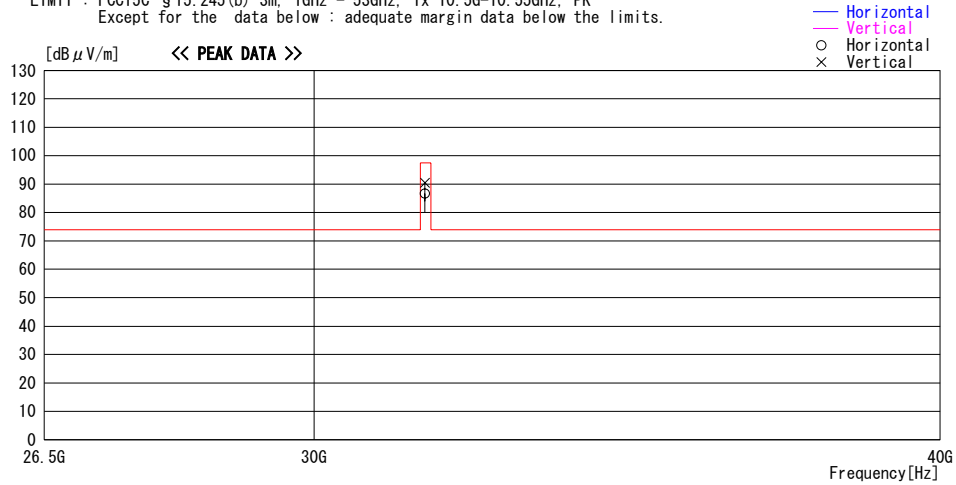
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Temp./Humi. : 21deg. C / 34%
Operator : Kenichi Adachi

Mode / Remarks : Transmitting / EUT Max-axis (Hor.: X-axis, Ver.:X-axis)

LIMIT : FCC15C §15.245 (b) 3m, 1GHz - 53GHz, Tx 10.5G-10.55GHz, PK
Except for the data below : adequate margin data below the limits.



Frequency	Reading	DET	Antenna	Loss &	Level	Angle	Height	Polar.	Limit	Margin
			Factor	Gain						
[MHz]	[dB μ V]		[dB/m]	[dB]	[dB μ V/m]	[Deg]	[cm]		[dB μ V/m]	[dB]
31564.720	77.5	PK	43.3	-34.2	86.6	180	100	Hori.	97.5	10.9
31564.620	81.3	PK	43.3	-34.2	90.4	180	100	Vert.	97.5	7.1

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

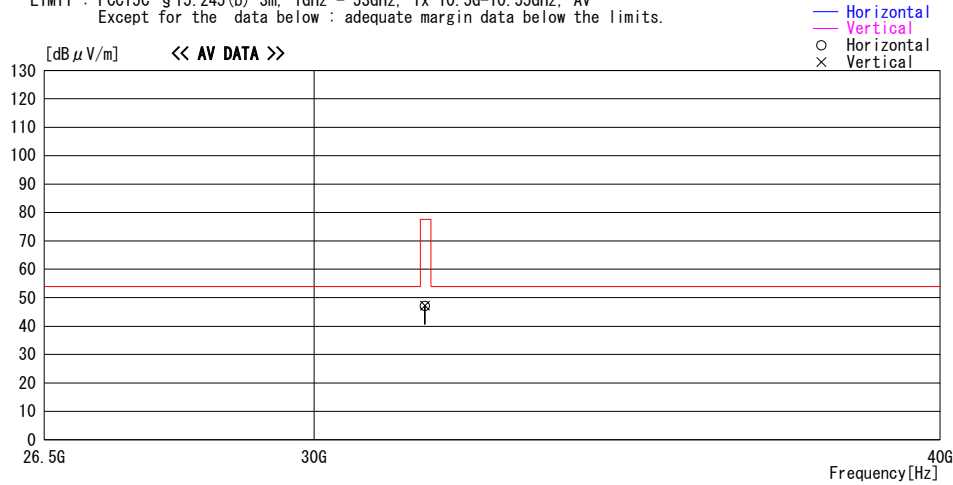
Radiated Emission DATA OF RADIATED EMISSION TEST

UL Apex Co., Ltd. Head Office EMC Lab. No.2 Semi Anechoic Chamber
Date : 2004/12/07 12:05:25

Applicant : NIPPON ALEPH CORP.
Kind of EUT : Outdoor Dual Technology Detector
Model No. : XC-1XT
Serial No. : 1
Report No. : 25DE0238-HO
Power : DC 12.0V
Temp./Humi. : 21deg. C / 34%
Operator : Kenichi Adachi

Mode / Remarks : Transmitting / EUT Max-axis (Hor.: X-axis, Ver.:X-axis)

LIMIT : FCC15C §15.245 (b) 3m, 1GHz - 53GHz, Tx 10.5G-10.55GHz, AV
Except for the data below : adequate margin data below the limits.



Frequency	Reading	DET	Antenna	Loss &	Level	Angle	Height	Polar.	Limit	Margin
			Factor	Gain						
[MHz]	[dB μ V]		[dB/m]	[dB]	[dB μ V/m]	[Deg]	[cm]		[dB μ V/m]	[dB]
31564.720	38.0	AV	43.3	-34.2	47.1	180	100	Hori.	77.5	30.4
31564.620	38.1	AV	43.3	-34.2	47.2	180	100	Vert.	77.5	30.3

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

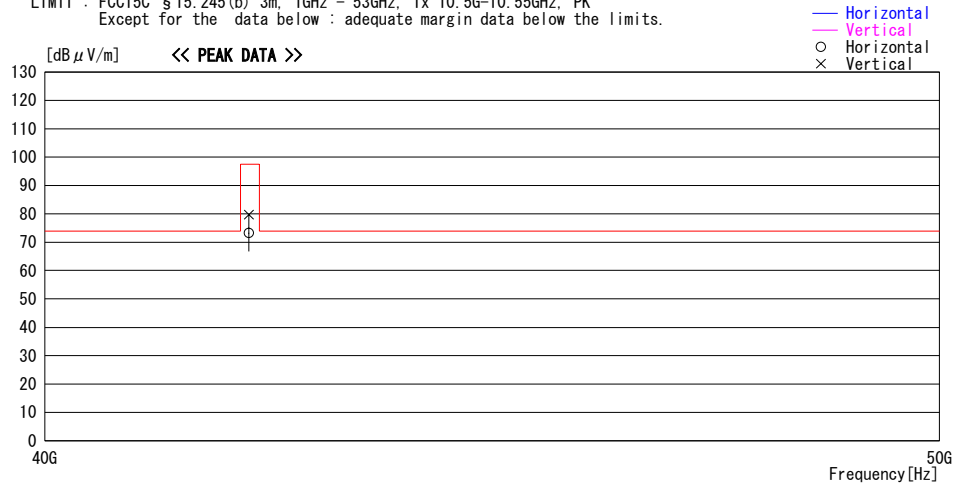
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Frequency	Reading	DET	Antenna	Loss &	Level	Angle	Height	Polar.	Limit	Margin
			Factor	Gain						
[MHz]	[dB μ V]		[dB/m]	[dB]	[dB μ V/m]	[Deg]	[cm]		[dB μ V/m]	[dB]
42087.290	59.4	PK	39.4	-25.5	73.3	180	100	Hori.	97.5	24.2
42087.330	65.8	PK	39.4	-25.5	79.7	180	100	Vert.	97.5	17.8

CHART: WITH FACTOR ANT TYPE : -30MHz LOOP, 30-300MHz BICONICAL, 300MHz-1000MHz LOGPERIODIC, 1000MHz- HORN
CALCULATION : READING + ANT FACTOR + LOSS (CABLE+ATTEN.) - AMP. GAIN
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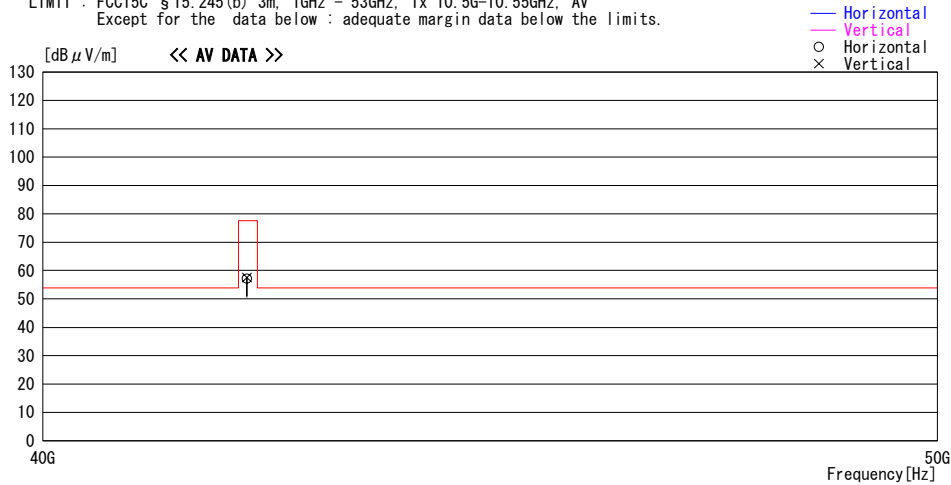
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LIMIT : FCC15C §15.245 (b) 3m, 1GHz - 53GHz, Tx 10.5G-10.55GHz, AV
Except for the data below : adequate margin data below the limits.



Frequency	Reading	DET	Antenna	Loss&	Level	Angle	Height	Polar.	Limit	Margin
			Factor	Gain						
[MHz]	[dB μ V]		[dB/m]	[dB]	[dB μ V/m]	[Deg]	[cm]		[dB μ V/m]	[dB]
42087.290	43.2	AV	39.4	-25.5	57.1	180	100	Hori.	77.5	20.4
42087.330	43.6	AV	39.4	-25.5	57.5	180	100	Vert.	77.5	20.0

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

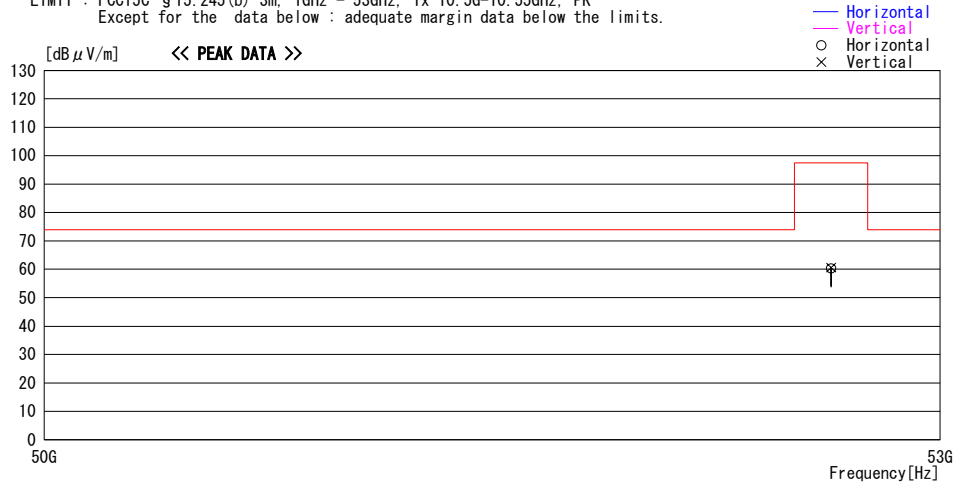
Radiated Emission DATA OF RADIATED EMISSION TEST

UL Apex Co., Ltd. Head Office EMC Lab. No.2 Semi Anechoic Chamber
Date : 2004/12/07 12:05:25

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Model No. : XC-1XT
Serial No. : 1
Report No. : 25DE0238-HO
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Mode / Remarks : Transmitting / EUT Max-axis (Hor.: X-axis, Ver.:X-axis)

LIMIT : FCC15C §15.245 (b) 3m, 1GHz - 53GHz, Tx 10.5G-10.55GHz, PK
Except for the data below : adequate margin data below the limits.



Frequency	Reading	DET	Antenna		Level	Angle	Height	Polar.	Limit	Margin
			Factor	Gain						
[MHz]	[dB μ V]		[dB/m]	[dB]	[dB μ V/m]	[Deg]	[cm]		[dB μ V/m]	[dB]
52825.000	54.2	PK	41.6	-35.6	60.2	180	100	Hori.	97.5	37.3
52825.000	54.6	PK	41.6	-35.6	60.6	180	100	Vert.	97.5	36.9

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

Radiated Emission DATA OF RADIATED EMISSION TEST

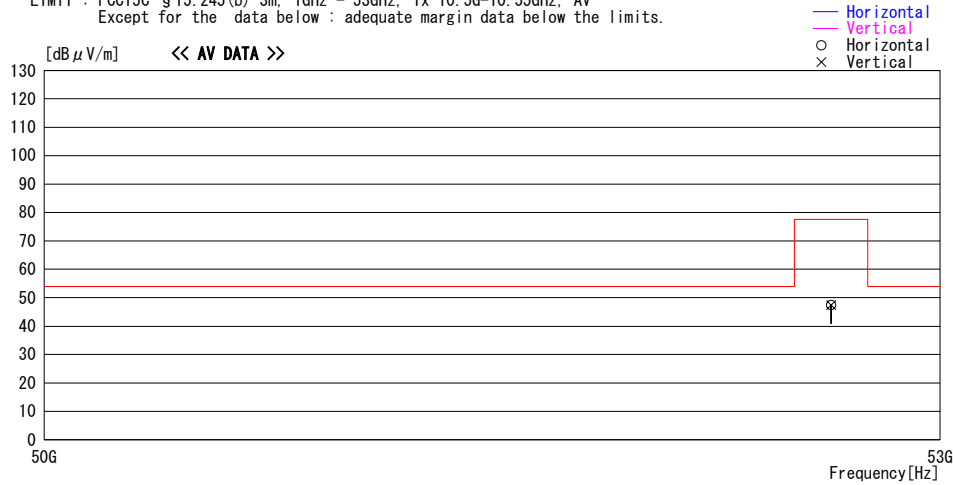
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LIMIT : FCC15C §15.245(b) 3m, 1GHz - 53GHz, Tx 10.5G-10.55GHz, AV
Except for the data below : adequate margin data below the limits.



Frequency	Reading	DET	Antenna	Loss&	Level	Angle	Height	Polar.	Limit	Margin
			Factor	Gain						
[MHz]	[dB μ V]		[dB/m]	[dB]	[dB μ V/m]	[Deg]	[cm]		[dB μ V/m]	[dB]
52825.000	41.4	AV	41.6	-35.6	47.4	180	100	Hori.	77.5	30.1
52825.000	41.4	AV	41.6	-35.6	47.4	180	100	Vert.	77.5	30.1

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

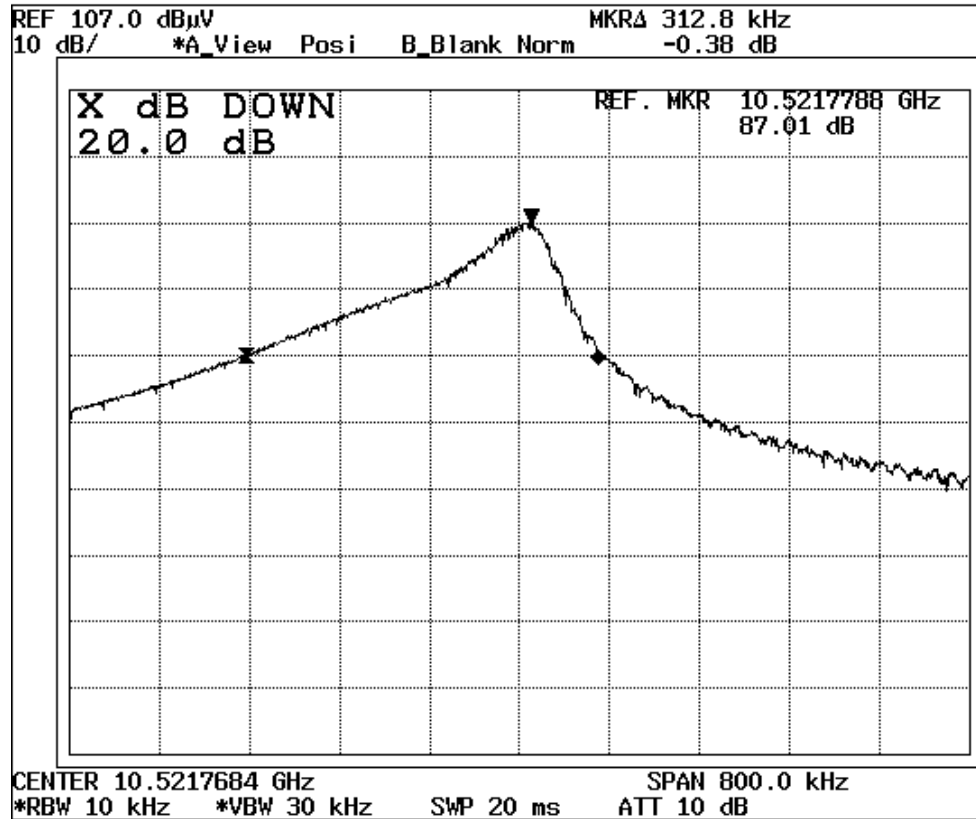
-20dB Bandwidth

UL Apex Co., Ltd.
Head Office EMC Lab. No.2 Measurement room

Company : NIPPON ALEPH CORP.
Equipment : Outdoor Dual Technology Detector
Model : XC-1XT
Serial No. : 1
Power : DC 12V
Mode : Transmitting

REPORT NO : 25DE0238-HO
REGULATION : FCC part 15 section 15.215(c)
TEST DISTANCE : -
DATE : 12/10/2004
TEMPERATURE : 25 deg.C
HUMIDITY : 35 %
ENGINEER : Yutaka Yoshida

FREQ	-20dB
[MHz]	Bandwidth
	[kHz]
10521.8	312.80



99% Occupied Bandwidth

UL Apex Co., Ltd.
Head Office EMC Lab. No.2 Measurement room

Company : NIPPON ALEPH CORP.
Equipment : Outdoor Dual Technology Detector
Model : XC-1XT
Serial No. : 1
Power : DC 12V
Mode : Transmitting

REPORT NO : 25DE0238-HO
REGULATION : RSS-210 (issue 5)
TEST DISTANCE : -
DATE : 12/10/2004
TEMPERATURE : 25 deg.C
HUMIDITY : 35 %
ENGINEER : Yutaka Yoshida

FREQ	99% Occupied Bandwidth
[MHz]	[kHz]
10521.8	383.20

