EMC TEST REPORT

Issued: December 29, 2011

Name and Address of the Client:	NISSIN INDUSTRY CO., LTD. 3-2-11, Shibukawa-cho, Higashi-Osaka, Osaka, Japan
Test Item:	Microwave Oven
Identification:	MFM-9TP
Serial No.:	9GA11 1001523
Sample No.:	1
Sample Receipt Date:	December 8, 2011
Test Specification:	ICES-001 Issue 4 (CAN/CSA-CEI/IEC CISPR 11:04)
Date of Testing:	December 8, 12, 13 and 14, 2011
Test Result:	PASS

Tested by: T. Nakaseko (2011-12-29) T. Nakaseko

Tested by: Y. Nakaba (2011-12-29) Y. Nakaba

Reviewed by: K. Hasegawa (2011-12-29) K. Hasegawa, EMC Manager
iNARTE : EMC-003001-NE

Other Aspects:

Abbreviations:
PASS = passed
FAIL = failed
N/A = not applicable

Note:
This Test Report should not be reproduced except in full, without the written approval of Cosmos Corporation.
The test result of this Test Report is based on the tests made for sample provided, and it is not applicable to individual product identical to the sample or similar product.
The judgment of this test report validates the test item only specified in "5. Summary of Test Results".

Revision History

Revision	Issue Date	Description	Effect Page	Revised By
00	December 28, 2011	Initial Issue	-	-
01	December 29, 2011	Correction of name and address of the client	1	K. Yamashita

Contents

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1. General

This report describes the electromagnetic compatibility of the tested product. If the tested product will be used with additional equipment other than those mentioned in this report or if tested product will be used against the manufacturer's specification, the compliance with relevant standards for the system needs to be ensured.

2. Test Site

Cosmos Corporation Matsusaka EMC Center
718-1, Katsurase-cho, Matsusaka-shi, Mie-ken 515-1104, Japan

3. Description of the Tested Sample

Crystal Electric Co., Ltd., Model MFM-9TP (referred to as the EUT in this report) is Microwave Oven.

3.1 Rating

Rated Voltage	Rated Frequency	Rated Power
AC 120 V	60 Hz	1680 W

Input power condition during the test was AC 120 V, 60 Hz.
Operating frequency: 2.45 GHz

4. Test Condition

4.1 Mode of Operation

Mode of operation: Microwave Output (850 W)

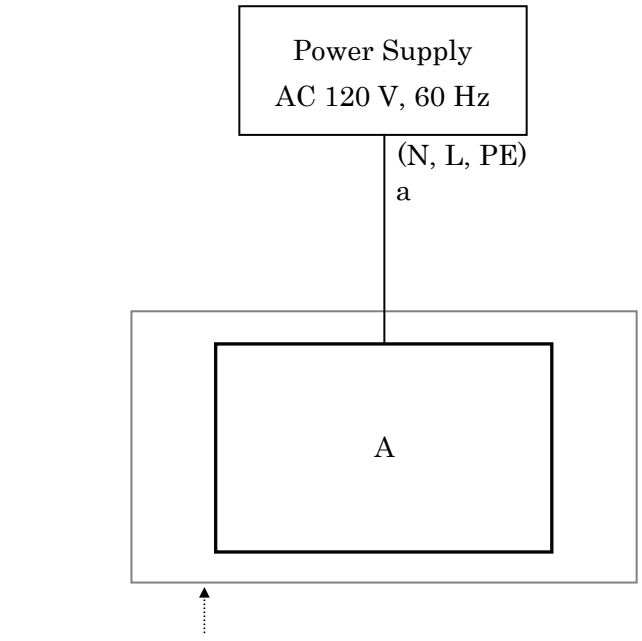
The water container shall be a cylindrical container of borosilicate glass of an external diameter of 190 mm ± 5 mm and a height of 90 mm ± 5 mm, see also IEC 60705 and with a load of 1000 ml of tap water initially at 20°C ± 5°C placed at the centre of the load-carrying surface provided by the manufacturer.

Before the measurement, preliminary operation of the microwave oven under test shall be performed until the magnetron oscillating frequency is stabilized. More than 5 min. preheating time is required.

During the measurement, the water load should be exchanged to cold water before it starts to boil.

4.2 Configuration

	Instrument	Model		Cable	Length	Shield
A	EUT	MFM-9TP	a	AC Power Cord	1.8 m	×



Excess cable arrangement

Conducted Emission

Symbol	Length	Position	Setting
a	0.3 m	Center	Bundle

5. Summary of Test Results

[Emission] ICES-001 Issue 4 (CAN/CSA-CEI/IEC CISPR 11:04)

Environmental Phenomena	Standard	Result
Radiated Disturbance (30 MHz to 1 GHz)	CISPR 11 (Group 2 Class B)	PASS
Radiated Disturbance (1 GHz to 18 GHz)	CISPR 11 (Group 2 Class B)	PASS
Radiated Disturbance (Weighted Measurement) (1.005 GHz to 2.395 GHz and 2.505 GHz to 17.995 MHz without 5.720 GHz to 5.880 GHz)	CISPR 11 (Group 2 Class B)	PASS
Radiated Disturbance (Magnetic Field) (0.15 MHz to 30 MHz)	CISPR 11 (Group 2 Class B)	PASS
Conducted Disturbance at Mains Terminal Port	CISPR 11 (Group 2 Class B)	PASS

6. Test Results Emission

6.1 Enclosure Port

6.1.1 Radiated Disturbance (Radiated Emission)

Result: **PASS**

In the frequency range from 0.15 MHz to 18 GHz, the electric field strength was measured according to ICES-001 Issue 4 (CAN/CSA-CEI/IEC CISPR 11:04).
The test setup was made according to ICES-001 Issue 4 (CAN/CSA-CEI/IEC CISPR 11:04) on the turntable installed in an anechoic chamber. The non-conductive table, 0.8 m high, was placed on the turntable, and the EUT was put on the non-conductive table. The measurement was carried out with both horizontal and vertical antenna polarization. The turntable was fully rotated. The highest radiation from the equipment was recorded. By varying the configuration of the test sample and the cable routing, it was attempted to maximize the emission. For further description of the configuration, refer to the pictures of this report.
The result was compared to the relevant limit
(refer to Table 4 <ICES-001 Issue 4 (CAN/CSA-CEI/IEC CISPR 11:04)>).

Mode of operation: Microwave Output (850 W)

(30 MHz to 1 GHz)

Distance between equipment and antenna: 10 m
Height of antenna: 1 m to 4 m

Uncertainty of measurement result: ±4.60 dB (30 MHz to 300 MHz)
Uncertainty of measurement result: ±4.54 dB (300 MHz to 1 GHz)

This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of k = 2.

For more details of the test results, refer to Appendix C, Emission Test Data.

6.1.1 Radiated Disturbance (Radiated Emission) (Continued)

(1 GHz to 18 GHz)

For peak measurements above 1 GHz, measurements were made with the azimuth of the EUT varying every 30° (starting position perpendicular to the front door). At each of these 12 positions, a maximum hold was made for a period of 20 s. Then, at the position where the maximum occurred, a maximum hold for a period of 2 min. was made, and the result compared to the relevant limit
(refer to Table 7 <ICES-001 Issue 4 (CAN/CSA-CEI/IEC CISPR 11:04)>).

(Weighted Measurement,
<1.005 GHz to 2.395 GHz and 2.505 GHz to 17.995 MHz without 5.720 GHz to 5.880 GHz>)

Weighted measurements above 1 GHz (refer to Table 8 <ICES-001 Issue 4 (CAN/CSA-CEI/IEC CISPR 11:04)>) was performed at the position where the maximum occurred during the peak measurements and was the result of a maximum hold during at least five sweeps.

To check the limits of Table 8, measurements needed only be performed around two center frequencies: The highest emission in the 1.005 GHz to 2.395 GHz range and the highest peak emission in the 2.505 GHz to 17.995 GHz range (outside the band 5.720 GHz to 5.880 GHz). At these two center frequencies, measurements were performed with a span of 10 MHz on the spectrum analyzer. For further description of the configuration, refer to the pictures of this report.

Measurement Instruments Setting

Spectrum Analyzer
RBW: 1 MHz
VBW: 10 Hz

Distance between equipment and antenna: 3 m
Height of antenna: 1 m

Uncertainty of measurement result: ±3.47 dB (1 GHz to 6 GHz)
Uncertainty of measurement result: ±3.56 dB (6 GHz to 18 GHz)

This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of k = 2.

For more details of the test results, refer to Appendix C, Emission Test Data.

6.1.1 Radiated Disturbance (Radiated Emission) (Continued)

(Magnetic Field Strength <0.15 MHz to 30 MHz>)

Distance between equipment and antenna: 3 m
Height of antenna: 1 m

Uncertainty of measurement result: ±3.11 dB (0.15 MHz to 30 MHz)

This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of k = 2.

The result was compared to the relevant limit
(refer to Table 4 <ICES-001 Issue 4 (CAN/CSA-CEI/IEC CISPR 11:04)>).

For more details of the test results, refer to Appendix C, Emission Test Data.

6.2 AC Power Port

6.2.1 Conducted Disturbance at Mains Terminal Port (Conducted Emission)

Result: **PASS**

The conducted disturbance at mains terminal port in the frequency range from 0.15 MHz to 30 MHz was measured according to ICES-001 Issue 4 (CAN/CSA-CEI/IEC CISPR 11:04).
The test setup was made according to ICES-001 Issue 4 (CAN/CSA-CEI/IEC CISPR 11:04) in a shielded room. The EUT was placed on the non-conductive table in 0.8 m distance from the horizontal ground plane. The used artificial-mains network (AMN) has a rated impedance of 50 Ω/50 µH or 50 Ω/50 µH + 5 Ω as specified in CISPR 16-1-2. The test receiver with Quasi Peak and Average detector is in compliance with CISPR 16-1-1.
The result was compared to the relevant limit
(refer to Table 2b <ICES-001 Issue 4 (CAN/CSA-CEI/IEC CISPR 11:04)>).

Mode of operation: Microwave Output (850 W)

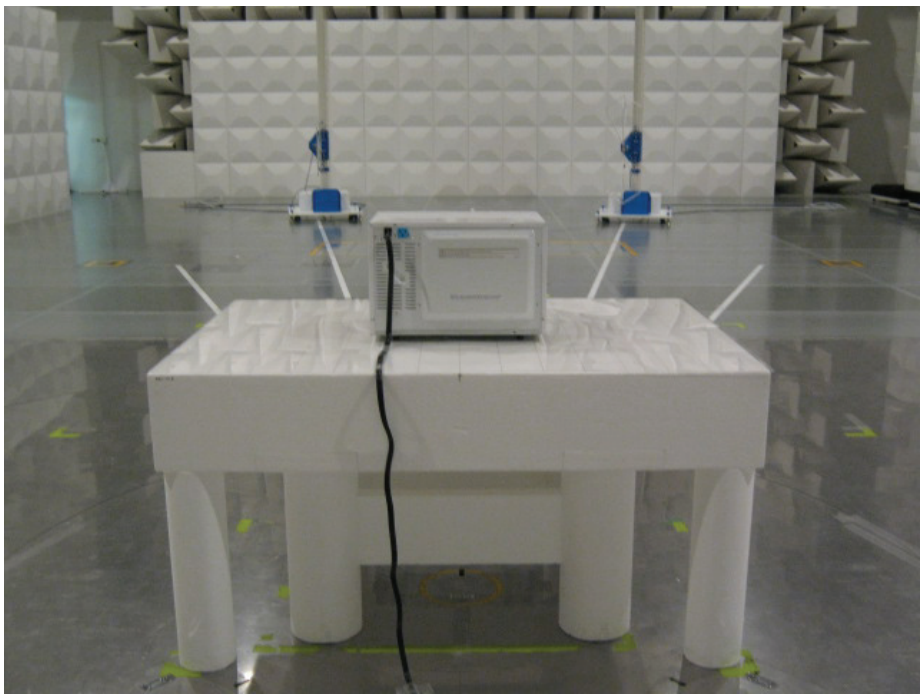
Uncertainty of measurement result: ±3.05 dB

This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of k = 2.

For more details of the test results, refer to Appendix C, Emission Test Data.

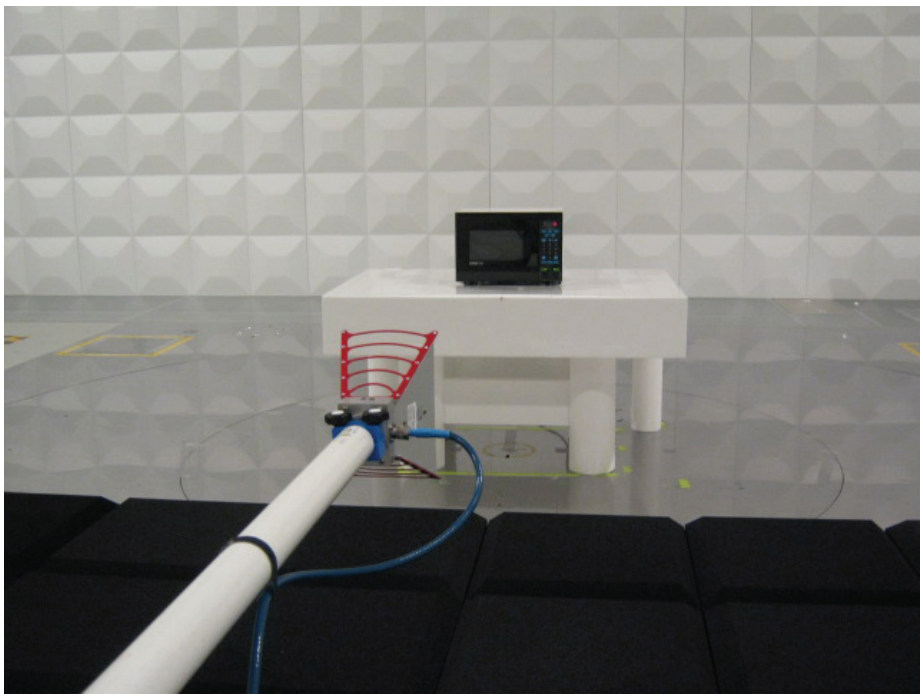
Appendix A: Photographs of the Test Setup

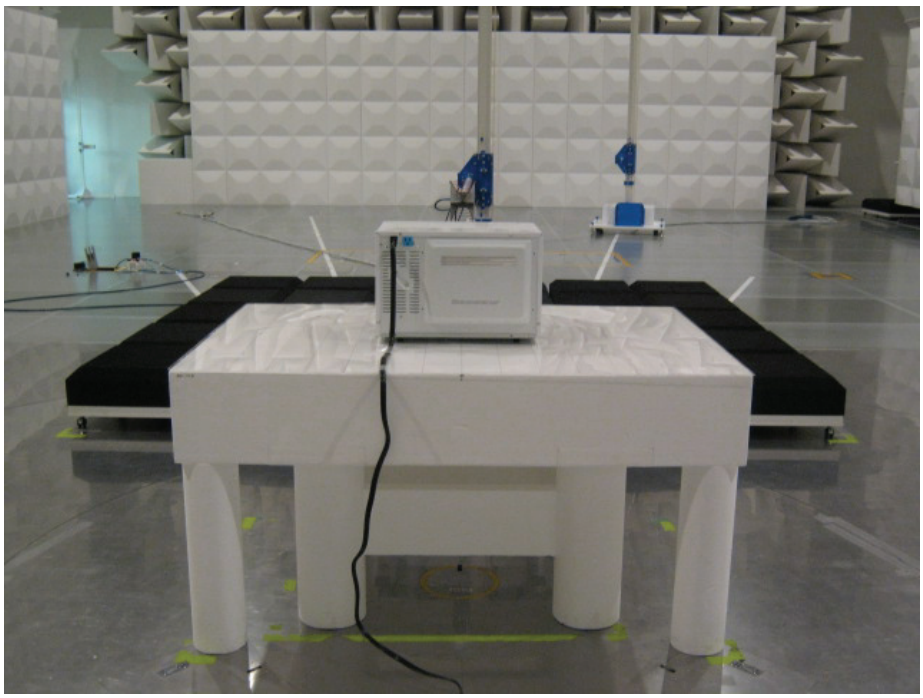
Radiated Emission (30 MHz to 1 GHz)



Appendix A: Photographs of the Test Setup (Continued)

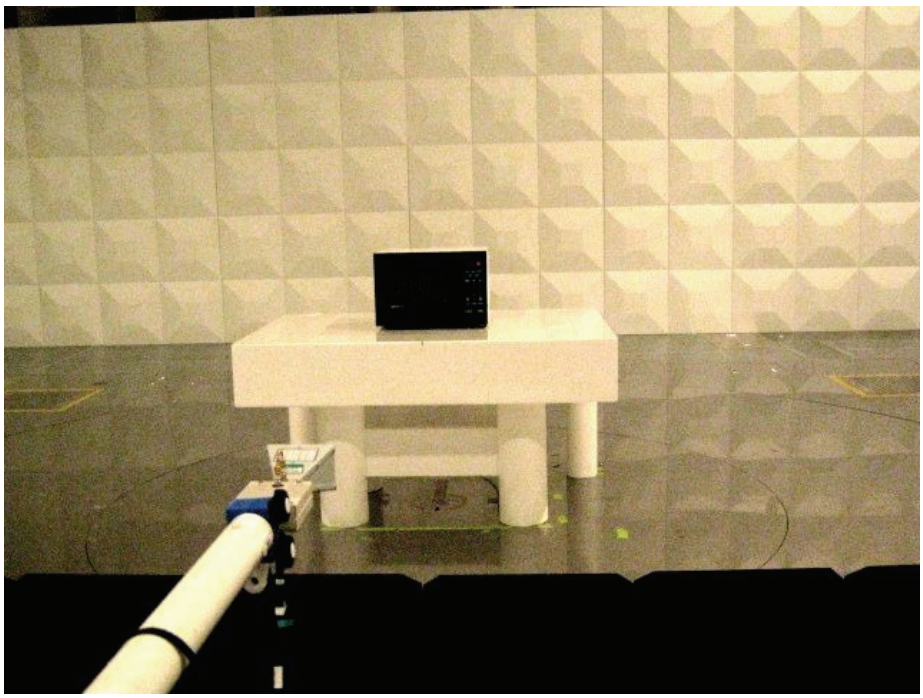
Radiated Emission (1 GHz to 6 GHz)

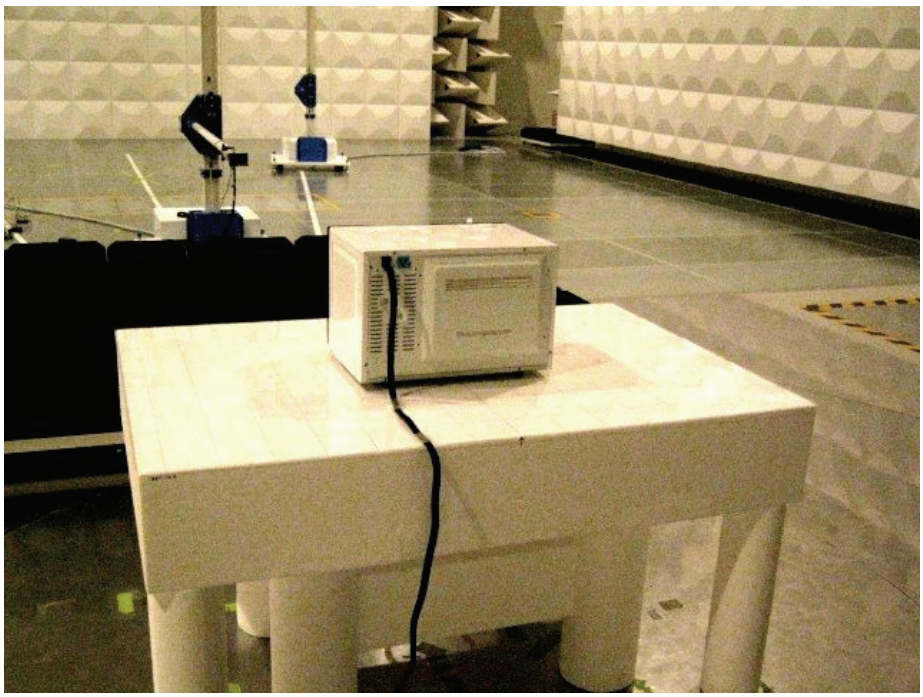




Appendix A: Photographs of the Test Setup (Continued)

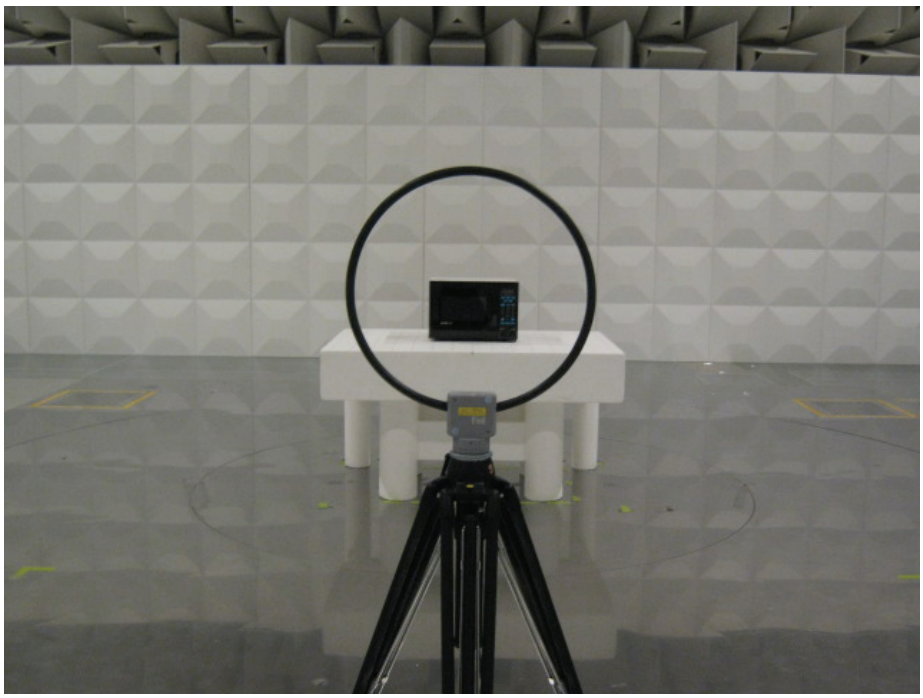
Radiated Emission (6 GHz to 18 GHz)

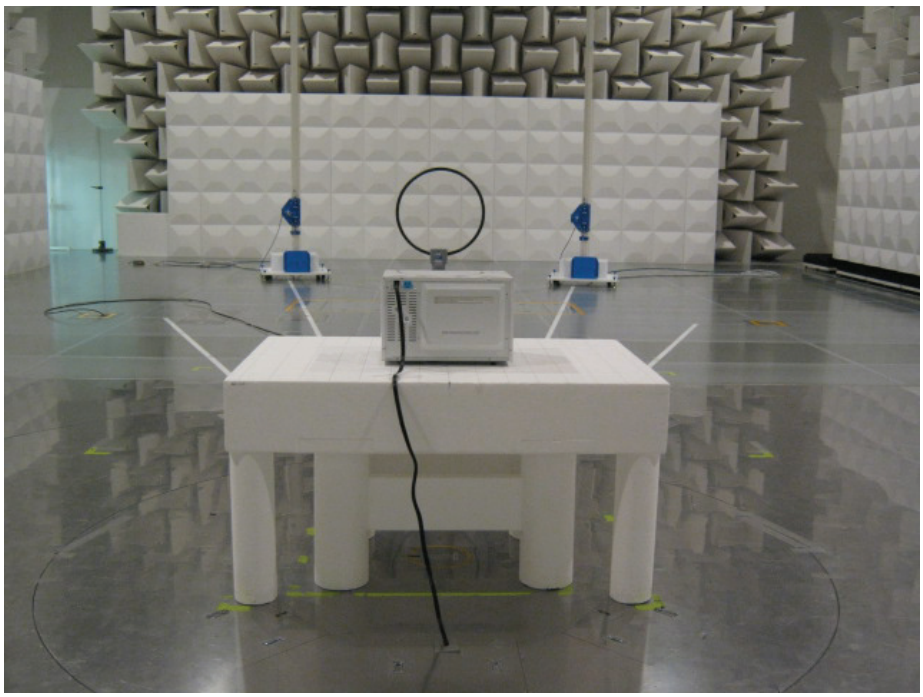




Appendix A: Photographs of the Test Setup (Continued)

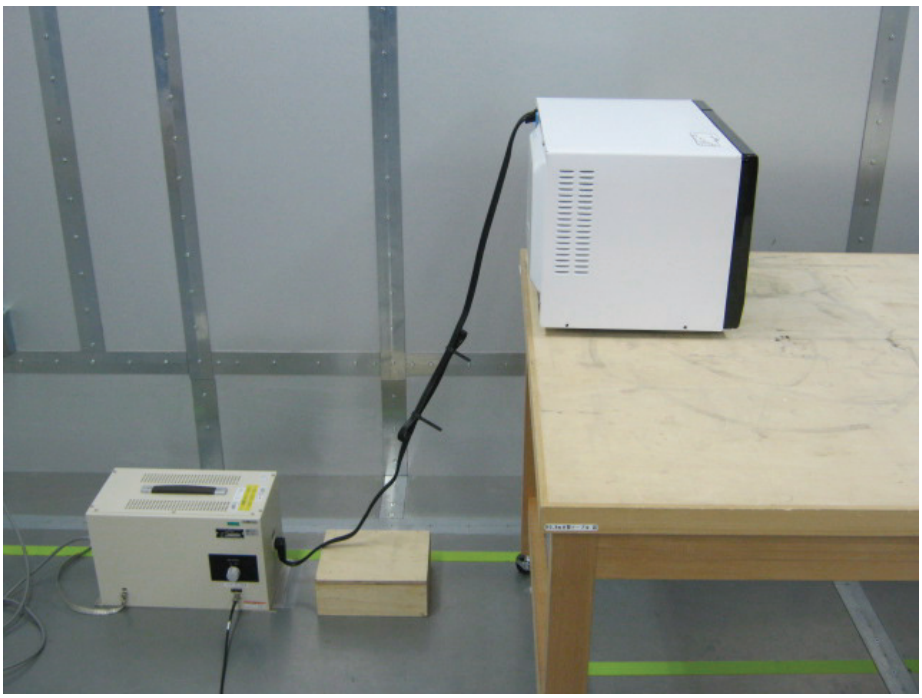
Radiated Emission (0.15 MHz to 30 MHz)

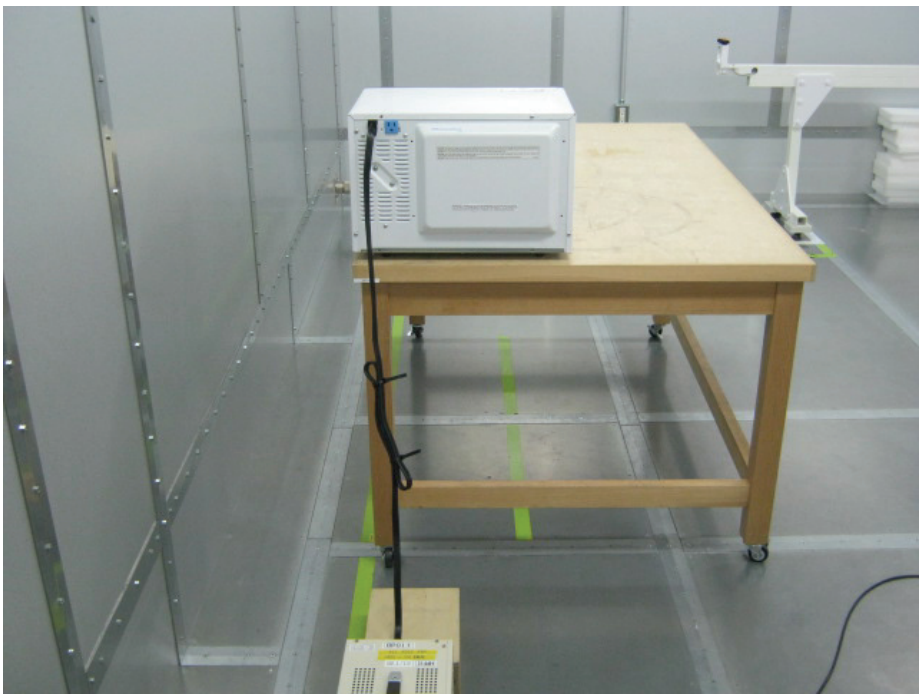




Appendix A: Photographs of the Test Setup (Continued)

Conducted Emission





Appendix B: List of Test and Measurement Instruments

Radiated Emission

Instruments	Manufacturer	Model	Serial No.	Calibrated Date/Until
Spectrum Analyzer	AGILENT	E4402B	MY45118896	June, 2011 June, 2012
EMI Test Receiver	ROHDE & SCHWARZ	ESU40	100138	May, 2011 May, 2012
Loop Antenna	ROHDE & SCHWARZ	HFH2-Z2	100202	October, 2011 October, 2012
Pre-Amplifier	SONOMA	310N	292050	September, 2011 September, 2012
Pre-Amplifier	SONOMA	310N	292051	September, 2011 September, 2012
Horn Antenna	ETS-LINDGREN	3115	00110032	April, 2011 April, 2012
Pre-Amplifier	TOYO	TPA0108-40	0828	September, 2011 September, 2012
Standard Gain Horn Antenna & Pre-Amplifier	TOYO	HAP06-18W	00000041	April, 2011 April, 2012
Biconical Antenna	SCHWARZBECK	VHBB9124 BBA9106	446	April, 2011 April, 2012
Log-periodic Antenna	SCHWARZBECK	VUSLP9111	330	April, 2011 April, 2012
10 m Anechoic Chamber	TOKIN	CMAC10M-01	01	May, 2011 May, 2012
RF Selector	TOYO	NS4900	0905-286	May, 2011 May, 2012
RF Cable	SUHNER	RG214/u	C08 (10)	December, 2011 December, 2012
		S04272B	C06 (10) C07 (10)	
		S10172B	C11 (10)	
RF Cable	DRAKA COMTEQ	RG213	C34 (10)	December, 2011 December, 2012
RF Cable	SUHNER	RG214/u	C01 (10) C03 (10) C08 (10)	August, 2011 August, 2012
		S04272B	C02 (10) C06 (10) C07 (10)	
		S10172B	C04 (10) C09 (10) C11 (10)	
		SF104A	C05 (10) C10 (10) C32 (10)	
RF Cable	SUHNER	SF104A	C33 (10)	August, 2011 August, 2012

Appendix B: List of Test and Measurement Instruments (Continued)

Conducted Emission

Instruments	Manufacturer	Model	Serial No.	Calibrated Date/Until
EMI Test Receiver	ROHDE & SCHWARZ	ESCI	100876	March, 2011 March, 2012
Artificial-Mains Network	KYORITSU	KNW-242F	8-2038-1	July, 2011 July, 2012
RF Selector	TOYO	NS4900	0905-285	May, 2011 May, 2012
RF Cable	SUHNER	S04272B	C01 (SA)	May, 2011 May, 2012
		RG214/u	C06 (SA)	
		RG223/u	C07 (SA)	

Appendix C: Emission Test Data

I) Total 14 Pages: Page 19 to 32

II) Calculation

Result = Reading + c.f.
Margin = Limit – Result

Appendix C: Emission Test Data (Continued)

Radiated Emission (30 MHz to 1 GHz) <Table 4>

```
************************************  Cosmos Corporation  ************************************
                          <<Radiated Emission EP5/RE Ver. 4.2.20 10M>>  12 December,2011 11:25
                                                                        107364E RE Total01.dat

Limit             : CISPR11 Group2 ClassB 10m
Model             : MFM-9TP
Serial            : 9GA11 1001523
Operator          : Y. Nakaba
Power             : AC 120V , 60Hz
Temp. Humi.       : 17℃, 33%
Remark1           : Operated
Remark2           : Microwave Output: 850 W
Remark3           :
Remark4           : RBW : 120kHz
*****************************************************************************************************
Final Result

--- Horizontal Polarization (QP)---
No.   Frequency    Reading      c.f       Result       Limit      Margin  Height   Angle  System
        [MHz]    [dB(μV)] [dB(1/m)] [dB(μV/m)] [dB(μV/m)]   [dB]    [cm]    [°]
  1     81.570      22.1     -18.1        4.0        50.0      46.0   400.0    62.0     2
  2    136.245      22.3     -15.0        7.3        50.0      42.7   400.0   359.0     2
  3    367.390      22.6     -10.5       12.1        37.0      24.9   400.0   336.6     1
  4    466.689      22.6      -7.8       14.8        37.0      22.2   400.0   109.3     1
  5    745.683      22.4      -3.4       19.0        37.0      18.0   400.0   300.5     1
  6    988.480      20.9       1.0       21.9        37.0      15.1   400.0   278.4     1

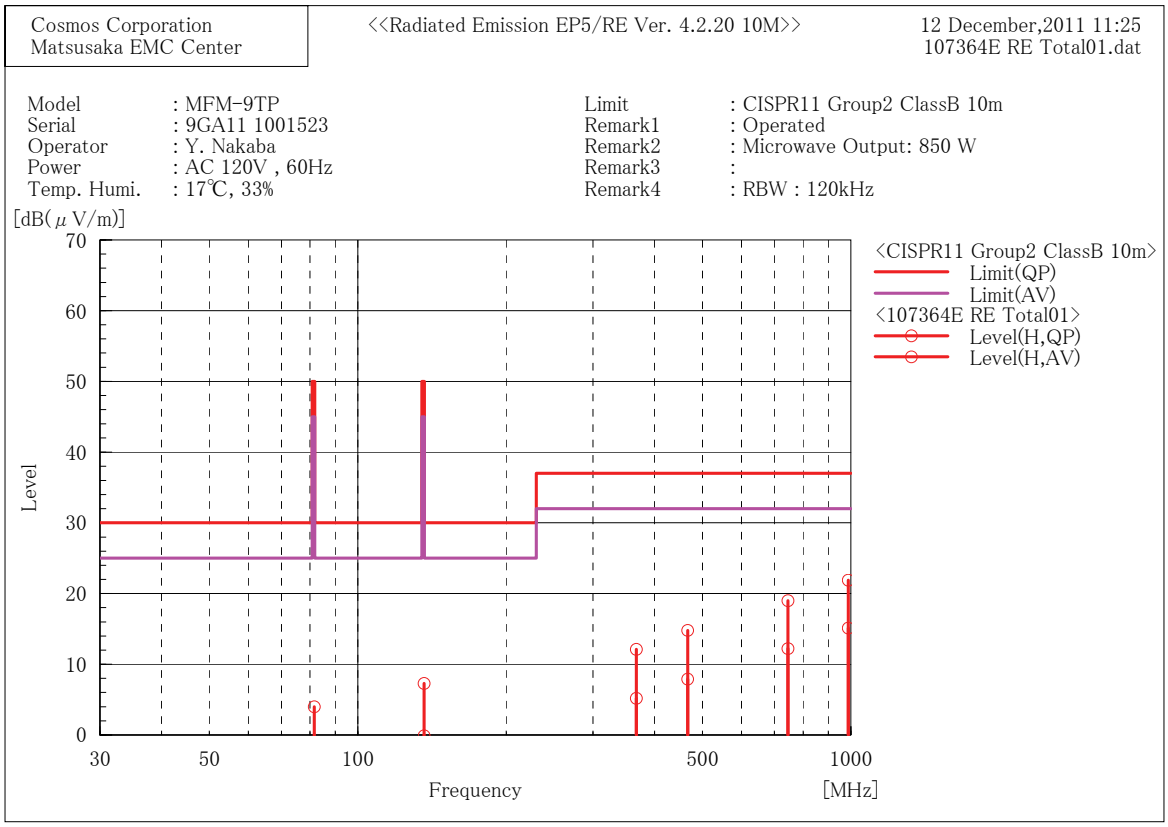
--- Horizontal Polarization (AV)---
No.   Frequency    Reading      c.f       Result       Limit      Margin  Height   Angle  System
        [MHz]    [dB(μV)] [dB(1/m)] [dB(μV/m)] [dB(μV/m)]   [dB]    [cm]    [°]
  1     81.570      15.3     -18.1       -2.8        45.0      47.8   400.0    62.0     2
  2    136.245      14.9     -15.0       -0.1        45.0      45.1   400.0   359.0     2
  3    367.390      15.7     -10.5        5.2        32.0      26.8   400.0   336.6     1
  4    466.689      15.7      -7.8        7.9        32.0      24.1   400.0   109.3     1
  5    745.683      15.6      -3.4       12.2        32.0      19.8   400.0   300.5     1
  6    988.480      14.1       1.0       15.1        32.0      16.9   400.0   278.4     1

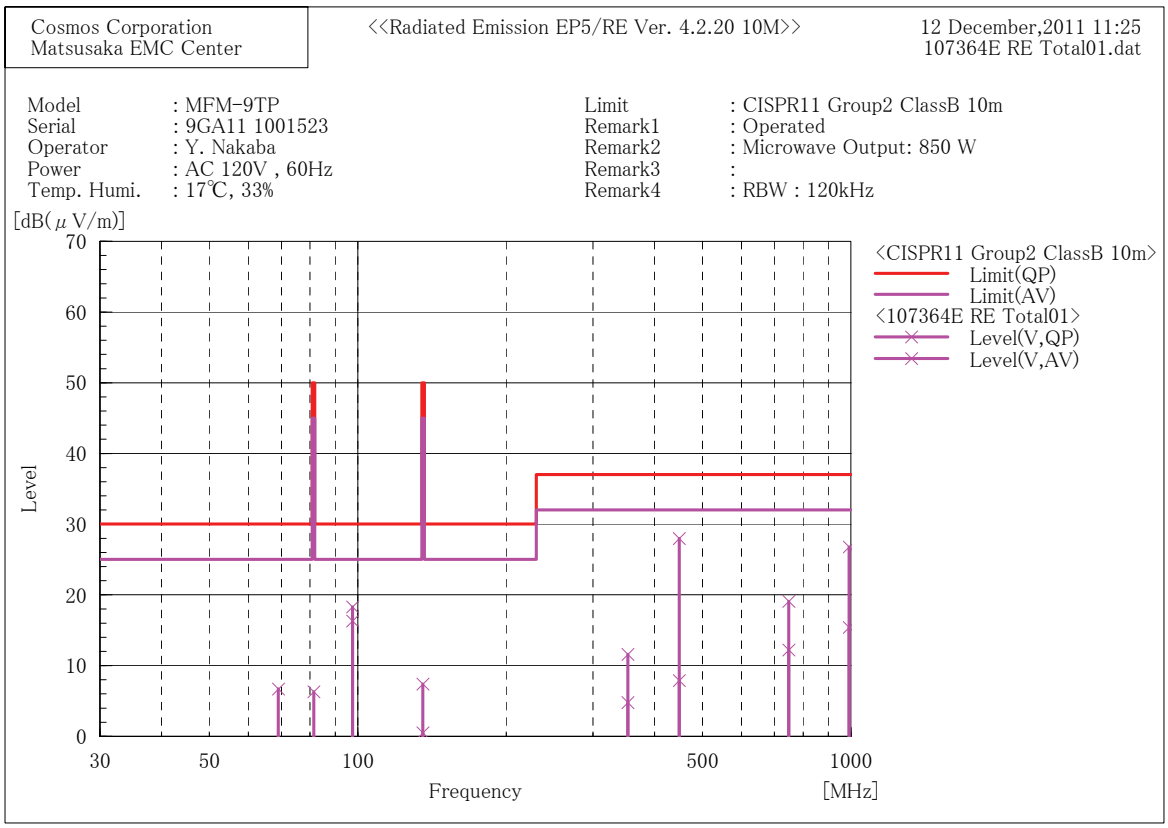
--- Vertical Polarization (QP)---
No.   Frequency    Reading      c.f       Result       Limit      Margin  Height   Angle  System
        [MHz]    [dB(μV)] [dB(1/m)] [dB(μV/m)] [dB(μV/m)]   [dB]    [cm]    [°]
  1     68.983      24.9     -18.2        6.7        30.0      23.3   126.4    79.6     2
  2     81.436      24.4     -18.1        6.3        50.0      43.7   190.5   286.4     2
  3     97.511      36.1     -17.8       18.3        30.0      11.7   100.0   246.6     2
  4    135.413      22.4     -15.0        7.4        50.0      42.6   100.0   177.6     2
  5    352.987      22.5     -10.9       11.6        37.0      25.4   100.0    88.5     1
  6    448.321      36.3      -8.3       28.0        37.0       9.0   354.1    80.3     1
  7    747.858      22.4      -3.3       19.1        37.0      17.9   100.0   315.1     1
  8    991.865      25.7       1.1       26.8        37.0      10.2   210.9   183.4     1

--- Vertical Polarization (AV)---
No.   Frequency    Reading      c.f       Result       Limit      Margin  Height   Angle  System
        [MHz]    [dB(μV)] [dB(1/m)] [dB(μV/m)] [dB(μV/m)]   [dB]    [cm]    [°]
  1     68.983      16.4     -18.2       -1.8        25.0      26.8   126.4    79.6     2
  2     81.436      15.5     -18.1       -2.6        45.0      47.6   190.5   286.4     2
  3     97.511      34.1     -17.8       16.3        25.0       8.7   100.0   246.6     2
  4    135.413      15.5     -15.0        0.5        45.0      44.5   100.0   177.6     2
  5    352.987      15.7     -10.9        4.8        32.0      27.2   100.0    88.5     1
  6    448.321      16.2      -8.3        7.9        32.0      24.1   354.1    80.3     1
  7    747.858      15.5      -3.3       12.2        32.0      19.8   100.0   315.1     1
  8    991.865      14.3       1.1       15.4        32.0      16.6   210.9   183.4     1
```

Appendix C: Emission Test Data (Continued)

Radiated Emission (30 MHz to 1 GHz) <Table 4>





Appendix C: Emission Test Data (Continued)

Radiated Emission (1 GHz to 6 GHz) <Table 7>

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************************************  Cosmos Corporation  ***********************************
                          <<Radiated Emission EP5/RE Ver. 4.2.20 10M>>  12 December,2011 18:51
                                                                  107364E RE Total01GC Table7.dat

Limit             : CISPR11 Group2 ClassB 3m Table7
Model             : MFM-9TP
Serial            : 9GA11 1001523
Operater          : Y. Nakaba
Power             : AC 120V , 60Hz
Tem. Hum.         : 17℃, 33%
Remark1           : Operated
Remark2           : Microwave Output: 850 W
Remark3           :
Remark4           : RBW  :  1MHz
*****************************************************************************************************
Final Result

--- Horizontal Polarization (PK)---
No.   Frequency   Reading     c.f      Result       Limit     Margin  Height   Angle
        [MHz]   [dB(μV)] [dB(1/m)] [dB(μV/m)] [dB(μV/m)]   [dB]   [cm]    [° ]
  1   1063.500     76.1      -7.3       68.8       92.0      23.2   100.0     0.0
  2   1063.500     75.1      -7.3       67.8       92.0      24.2   100.0    30.0
  3   1063.500     72.3      -7.3       65.0       92.0      27.0   100.0    60.0
  4   1063.500     55.6      -7.3       48.3       92.0      43.7   100.0    90.0
  5   1063.500     64.0      -7.3       56.7       92.0      35.3   100.0   120.0
  6   1063.500     60.8      -7.3       53.5       92.0      38.5   100.0   150.0
  7   1063.500     55.1      -7.3       47.8       92.0      44.2   100.0   180.0
  8   1063.500     62.7      -7.3       55.4       92.0      36.6   100.0   210.0
  9   1063.500     62.4      -7.3       55.1       92.0      36.9   100.0   240.0
 10   1063.500     57.6      -7.3       50.3       92.0      41.7   100.0   270.0
 11   1063.500     57.7      -7.3       50.4       92.0      41.6   100.0   300.0
 12   1063.500     61.9      -7.3       54.6       92.0      37.4   100.0   330.0
 13   4939.000     64.6      12.8       77.4       92.0      14.6   100.0     0.0
 14   4939.000     72.9      12.8       85.7       92.0       6.3   100.0    30.0
 15   4939.000     70.1      12.8       82.9       92.0       9.1   100.0    60.0
 16   4939.000     66.4      12.8       79.2       92.0      12.8   100.0    90.0
 17   4939.000     64.9      12.8       77.7       92.0      14.3   100.0   120.0
 18   4939.000     67.0      12.8       79.8       92.0      12.2   100.0   150.0
 19   4939.000     64.2      12.8       77.0       92.0      15.0   100.0   180.0
 20   4939.000     64.0      12.8       76.8       92.0      15.2   100.0   210.0
 21   4939.000     67.7      12.8       80.5       92.0      11.5   100.0   240.0
 22   4939.000     71.5      12.8       84.3       92.0       7.7   100.0   270.0
 23   4939.000     64.8      12.8       77.6       92.0      14.4   100.0   300.0
 24   4939.000     65.6      12.8       78.4       92.0      13.6   100.0   330.0
```

Appendix C: Emission Test Data (Continued)

Radiated Emission (1 GHz to 6 GHz) <Table 7>

```
************************************  Cosmos Corporation  ************************************
                          <<Radiated Emission EP5/RE Ver. 4.2.20 10M>>  12 December,2011 18:51
                                                                  107364E RE Total01GC Table7.dat

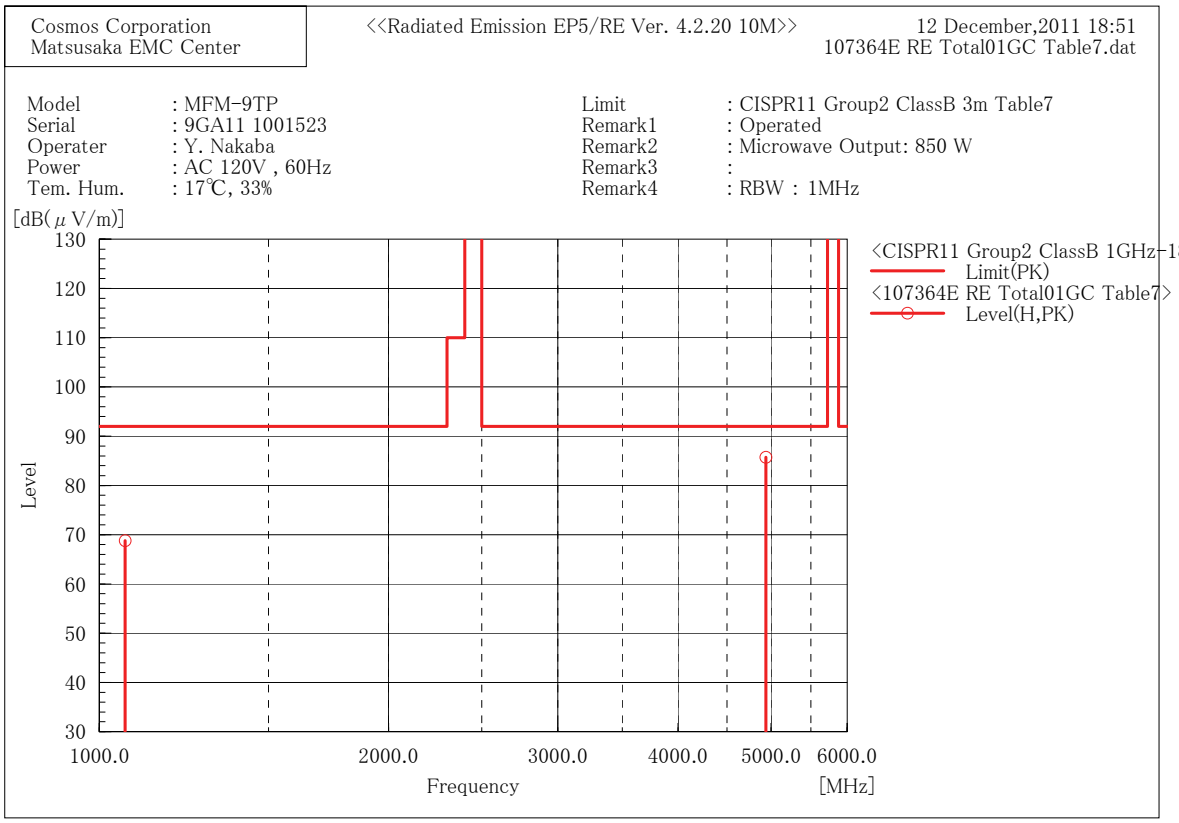
Limit              : CISPR11 Group2 ClassB 3m Table7
Model              : MFM-9TP
Serial             : 9GA11 1001523
Operater           : Y. Nakaba
Power              : AC 120V , 60Hz
Tem. Hum.          : 17℃, 33%
Remark1            : Operated
Remark2            : Microwave Output: 850 W
Remark3            :
Remark4            : RBW : 1MHz
*********************************************************************************************
Final Result

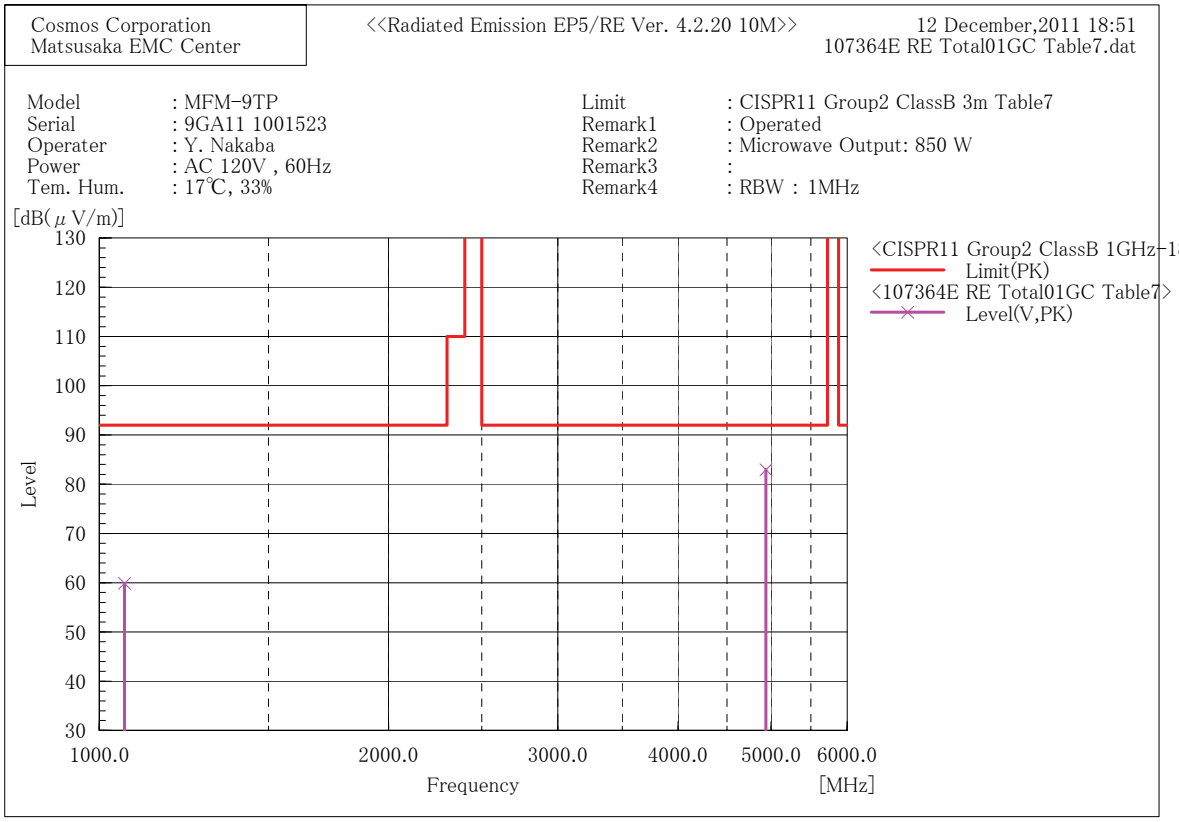
--- Vertical Polarization (PK)---
```

No.	Frequency [MHz]	Reading [dB(μV)]	c.f [dB(1/m)]	Result [dB(μV/m)]	Limit [dB(μV/m)]	Margin [dB]	Height [cm]	Angle [°]
1	1062.000	62.8	-7.3	55.5	92.0	36.5	100.0	0.0
2	1062.000	64.9	-7.3	57.6	92.0	34.4	100.0	30.0
3	1062.000	63.1	-7.3	55.8	92.0	36.2	100.0	60.0
4	1062.000	59.7	-7.3	52.4	92.0	39.6	100.0	90.0
5	1062.000	61.1	-7.3	53.8	92.0	38.2	100.0	120.0
6	1062.000	67.2	-7.3	59.9	92.0	32.1	100.0	150.0
7	1062.000	65.3	-7.3	58.0	92.0	34.0	100.0	180.0
8	1062.000	63.7	-7.3	56.4	92.0	35.6	100.0	210.0
9	1062.000	54.1	-7.3	46.8	92.0	45.2	100.0	240.0
10	1062.000	62.5	-7.3	55.2	92.0	36.8	100.0	270.0
11	1062.000	60.9	-7.3	53.6	92.0	38.4	100.0	300.0
12	1062.000	62.5	-7.3	55.2	92.0	36.8	100.0	330.0
13	4937.500	69.7	12.8	82.5	92.0	9.5	100.0	0.0
14	4937.500	69.2	12.8	82.0	92.0	10.0	100.0	30.0
15	4937.500	67.9	12.8	80.7	92.0	11.3	100.0	60.0
16	4937.500	57.5	12.8	70.3	92.0	21.7	100.0	90.0
17	4937.500	62.0	12.8	74.8	92.0	17.2	100.0	120.0
18	4937.500	64.8	12.8	77.6	92.0	14.4	100.0	150.0
19	4937.500	68.4	12.8	81.2	92.0	10.8	100.0	180.0
20	4937.500	66.0	12.8	78.8	92.0	13.2	100.0	210.0
21	4937.500	66.4	12.8	79.2	92.0	12.8	100.0	240.0
22	4937.500	64.4	12.8	77.2	92.0	14.8	100.0	270.0
23	4937.500	66.5	12.8	79.3	92.0	12.7	100.0	300.0
24	4937.500	70.2	12.8	83.0	92.0	9.0	100.0	330.0

Appendix C: Emission Test Data (Continued)

Radiated Emission (1 GHz to 6 GHz) <Table 7>





Appendix C: Emission Test Data (Continued)

Radiated Emission (6 GHz to 18 GHz) <Table 7>

```
************************************  Cosmos Corporation  ************************************
                          <<Radiated Emission EP5/RE Ver.4.2.20 10M>>   13 December,2011 19:24
                                                                 107364E RE Total02G CISPR .dat

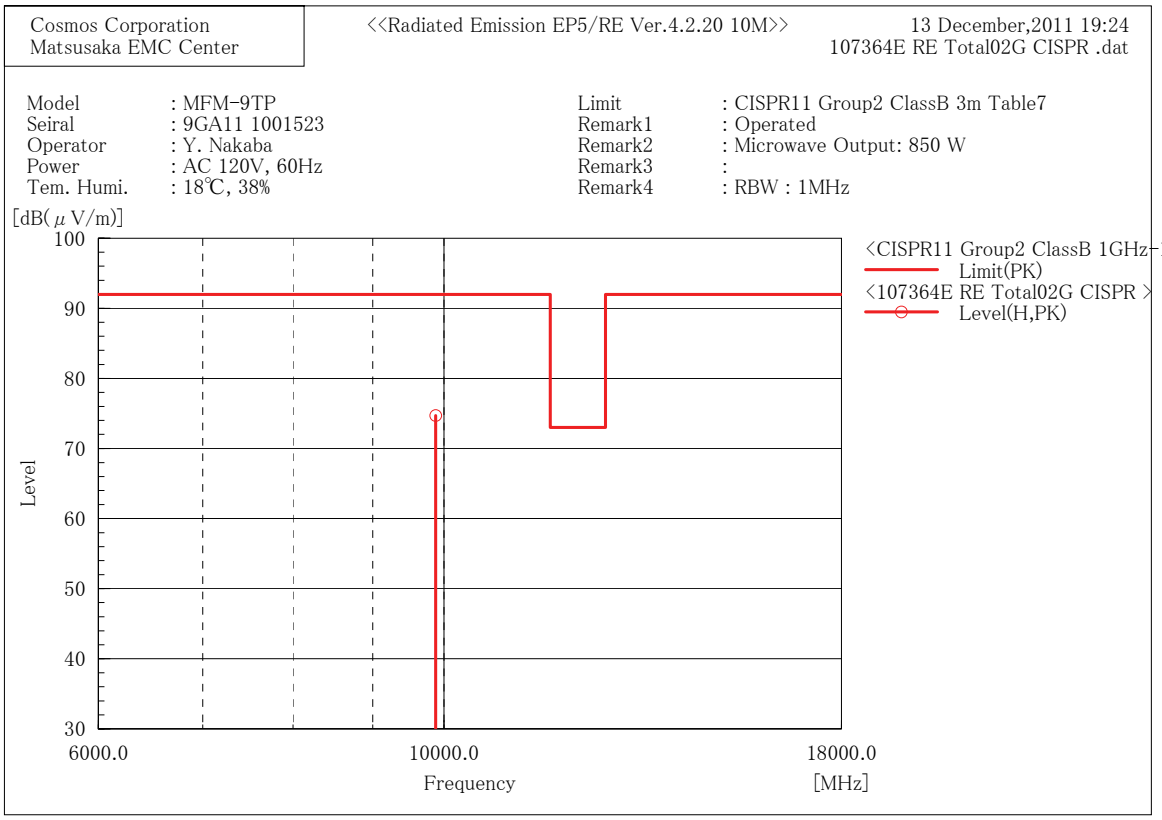
Limit             : CISPR11 Group2 ClassB 3m Table7
Model             : MFM-9TP
Seiral            : 9GA11 1001523
Operator          : Y. Nakaba
Power             : AC 120V, 60Hz
Tem. Humi.        : 18℃, 38%
Remark1           : Operated
Remark2           : Microwave Output: 850 W
Remark3           :
Remark4           : RBW : 1MHz
*****************************************************************************************************
Final Result

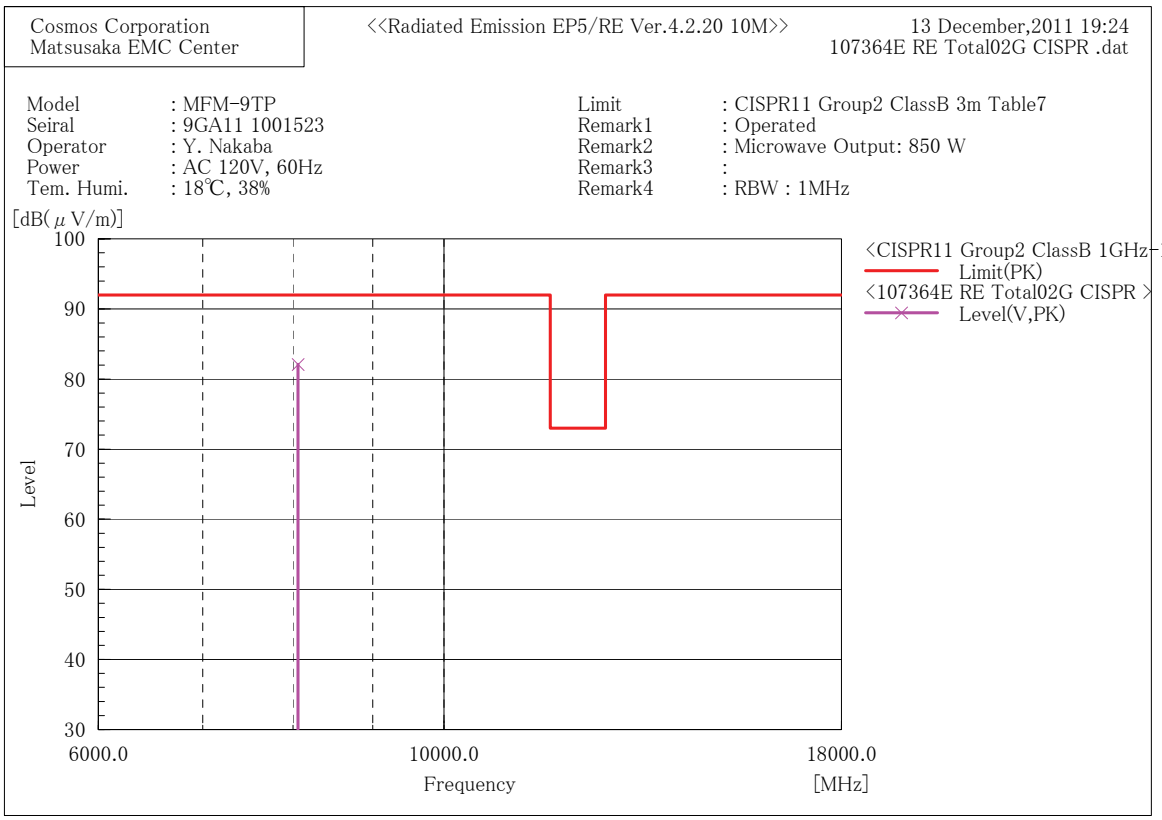
--- Horizontal Polarization (PK)---
No.   Frequency   Reading     c.f      Result       Limit     Margin  Height   Angle
        [MHz]    [dB(μV)] [dB(1/m)] [dB(μV/m)] [dB(μV/m)]   [dB]    [cm]    [°]
  1   9877.500      60.6       4.6       65.2       92.0      26.8    100.0     0.0
  2   9877.500      60.5       4.6       65.1       92.0      26.9    100.0    30.0
  3   9877.500      70.1       4.6       74.7       92.0      17.3    100.0    60.0
  4   9877.500      61.8       4.6       66.4       92.0      25.6    100.0    90.0
  5   9877.500      62.7       4.6       67.3       92.0      24.7    100.0   120.0
  6   9877.500      60.5       4.6       65.1       92.0      26.9    100.0   150.0
  7   9877.500      58.6       4.6       63.2       92.0      28.8    100.0   180.0
  8   9877.500      58.2       4.6       62.8       92.0      29.2    100.0   210.0
  9   9877.500      59.3       4.6       63.9       92.0      28.1    100.0   240.0
 10   9877.500      60.9       4.6       65.5       92.0      26.5    100.0   270.0
 11   9877.500      62.1       4.6       66.7       92.0      25.3    100.0   300.0
 12   9877.500      60.1       4.6       64.7       92.0      27.3    100.0   330.0

--- Vertical Polarization (PK)---
No.   Frequency   Reading     c.f      Result       Limit     Margin  Height   Angle
        [MHz]    [dB(μV)] [dB(1/m)] [dB(μV/m)] [dB(μV/m)]   [dB]    [cm]    [°]
  1   8058.750      81.6       0.5       82.1       92.0       9.9    100.0     0.0
  2   8058.750      70.6       0.5       71.1       92.0      20.9    100.0    30.0
  3   8058.750      66.1       0.5       66.6       92.0      25.4    100.0    60.0
  4   8058.750      65.1       0.5       65.6       92.0      26.4    100.0    90.0
  5   8058.750      66.7       0.5       67.2       92.0      24.8    100.0   120.0
  6   8058.750      73.4       0.5       73.9       92.0      18.1    100.0   150.0
  7   8058.750      67.1       0.5       67.6       92.0      24.4    100.0   180.0
  8   8058.750      63.2       0.5       63.7       92.0      28.3    100.0   210.0
  9   8058.750      66.4       0.5       66.9       92.0      25.1    100.0   240.0
 10   8058.750      64.3       0.5       64.8       92.0      27.2    100.0   270.0
 11   8058.750      65.1       0.5       65.6       92.0      26.4    100.0   300.0
 12   8058.750      74.7       0.5       75.2       92.0      16.8    100.0   330.0
```

Appendix C: Emission Test Data (Continued)

Radiated Emission (6 GHz to 18 GHz) <Table 7>





Appendix C: Emission Test Data (Continued)

Radiated Emission (Weighted Measurement (1 GHz to 6 GHz)) <Table 8>

```
************************************  Cosmos Corporation  ************************************
                          <<Radiated Emission EP5/RE Ver. 4.2.20 10M>>  12 December,2011 18:51
                                                                107364E RE Total01GC Table8.dat

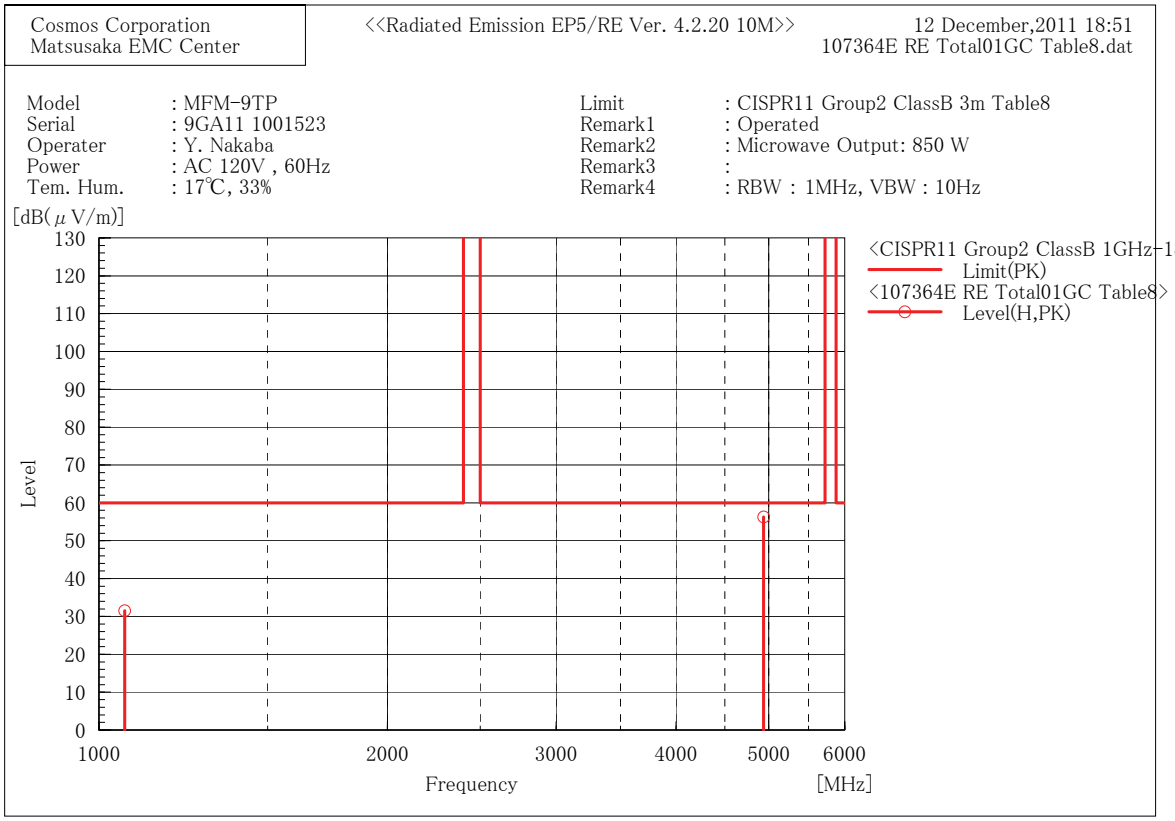
Limit             : CISPR11 Group2 ClassB 3m Table8
Model             : MFM-9TP
Serial            : 9GA11 1001523
Operater          : Y. Nakaba
Power             : AC 120V , 60Hz
Tem. Hum.         : 17℃, 33%
Remark1           : Operated
Remark2           : Microwave Output: 850 W
Remark3           :
Remark4           : RBW  :  1MHz, VBW : 10Hz
************************************************************************************************
Final Result

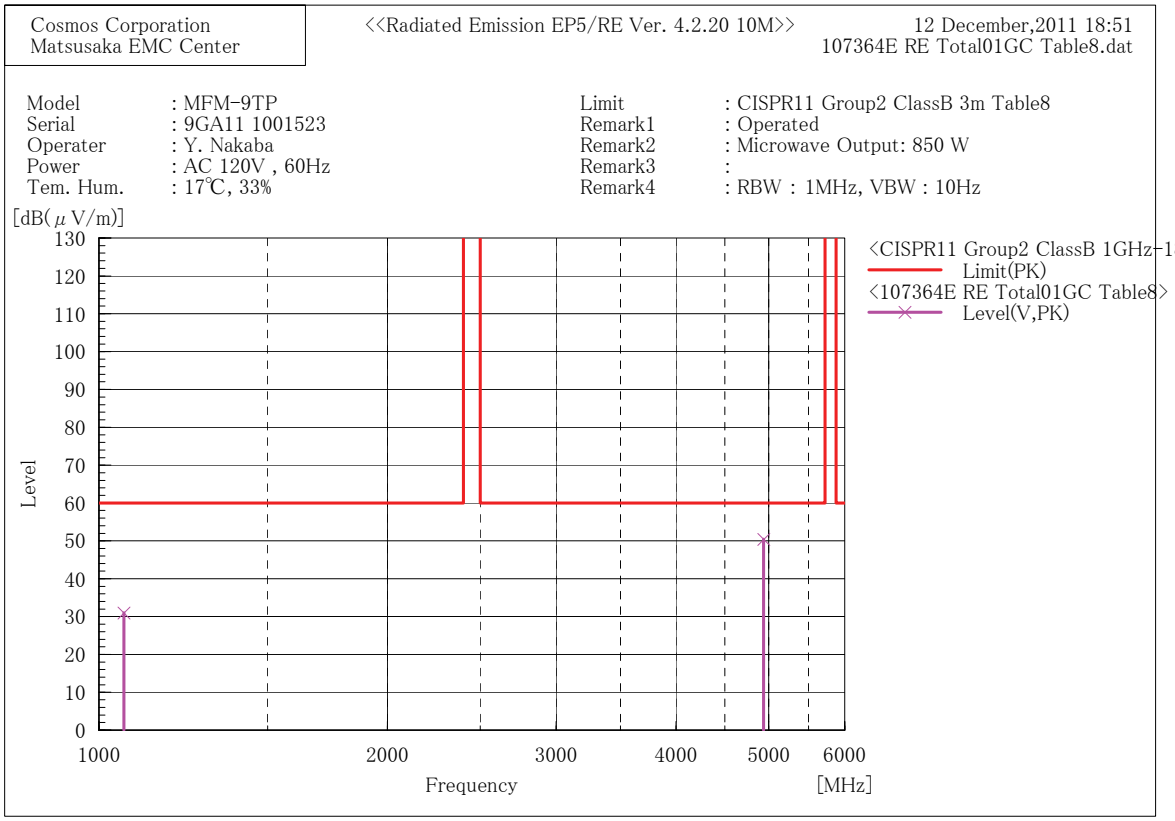
--- Horizontal Polarization (PK)---
No.   Frequency   Reading     c.f      Result       Limit     Margin  Height   Angle
        [MHz]    [dB(μV)] [dB(1/m)] [dB(μV/m)] [dB(μV/m)]   [dB]    [cm]    [° ]
  1   1063.500     38.8      -7.3       31.5        60.0      28.5    100.0     0.0
  2   4939.000     43.5      12.8       56.3        60.0       3.7    100.0    30.0

--- Vertical Polarization (PK)---
No.   Frequency   Reading     c.f      Result       Limit     Margin  Height   Angle
        [MHz]    [dB(μV)] [dB(1/m)] [dB(μV/m)] [dB(μV/m)]   [dB]    [cm]    [° ]
  1   1062.000     38.3      -7.3       31.0        60.0      29.0    100.0   150.0
  2   4937.500     37.6      12.8       50.4        60.0       9.6    100.0   330.0
```

Appendix C: Emission Test Data (Continued)

Radiated Emission (Weighted Measurement (1 GHz to 6 GHz)) <Table 8>





Appendix C: Emission Test Data (Continued)

Radiated Emission (Weighted Measurement (6 GHz to 18 GHz)) <Table 8>

```
************************************  Cosmos Corporation  ***********************************
                          <<Radiated Emission EP5/RE Ver.4.2.20 10M>>   13 December,2011 19:24
                                                          107364E RE Total02G CISPR Table8 .dat

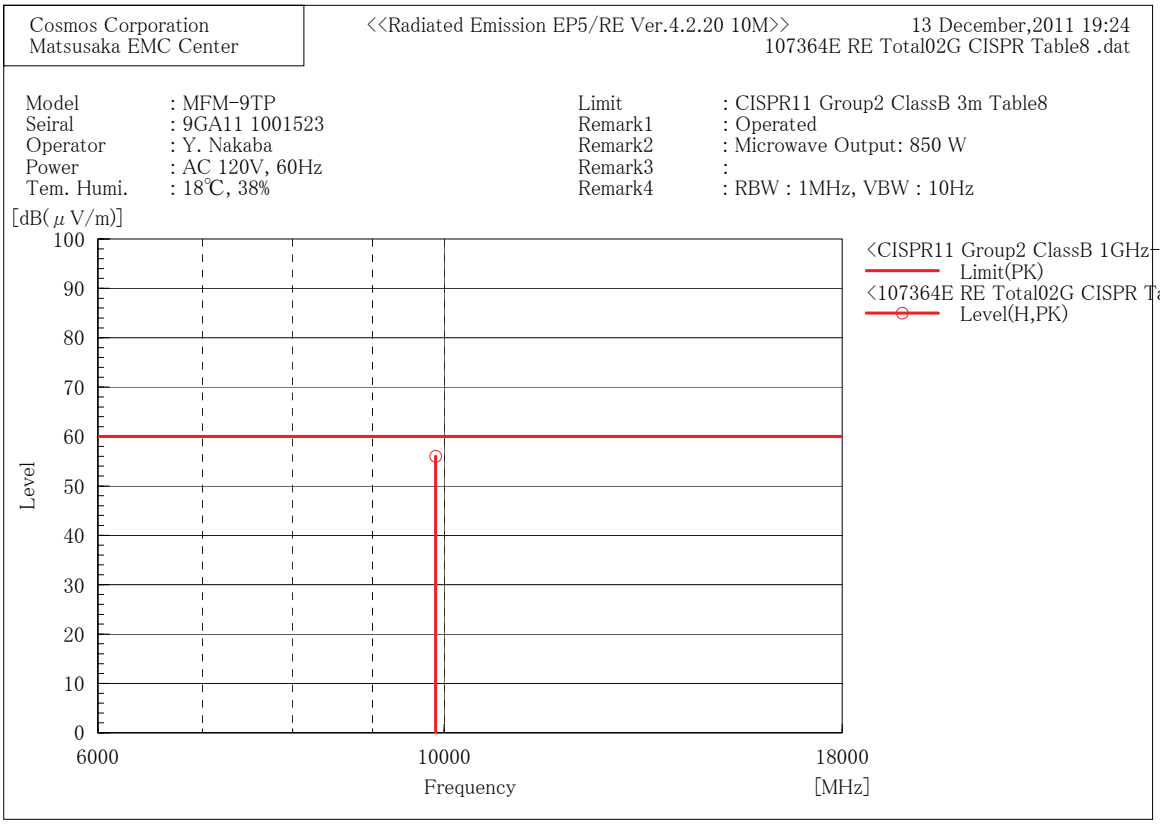
Limit             : CISPR11 Group2 ClassB 3m Table8
Model             : MFM-9TP
Seiral            : 9GA11 1001523
Operator          : Y. Nakaba
Power             : AC 120V, 60Hz
Tem. Humi.        : 18℃, 38%
Remark1           : Operated
Remark2           : Microwave Output: 850 W
Remark3           :
Remark4           : RBW : 1MHz, VBW : 10Hz
*************************************************************************************************
Final Result

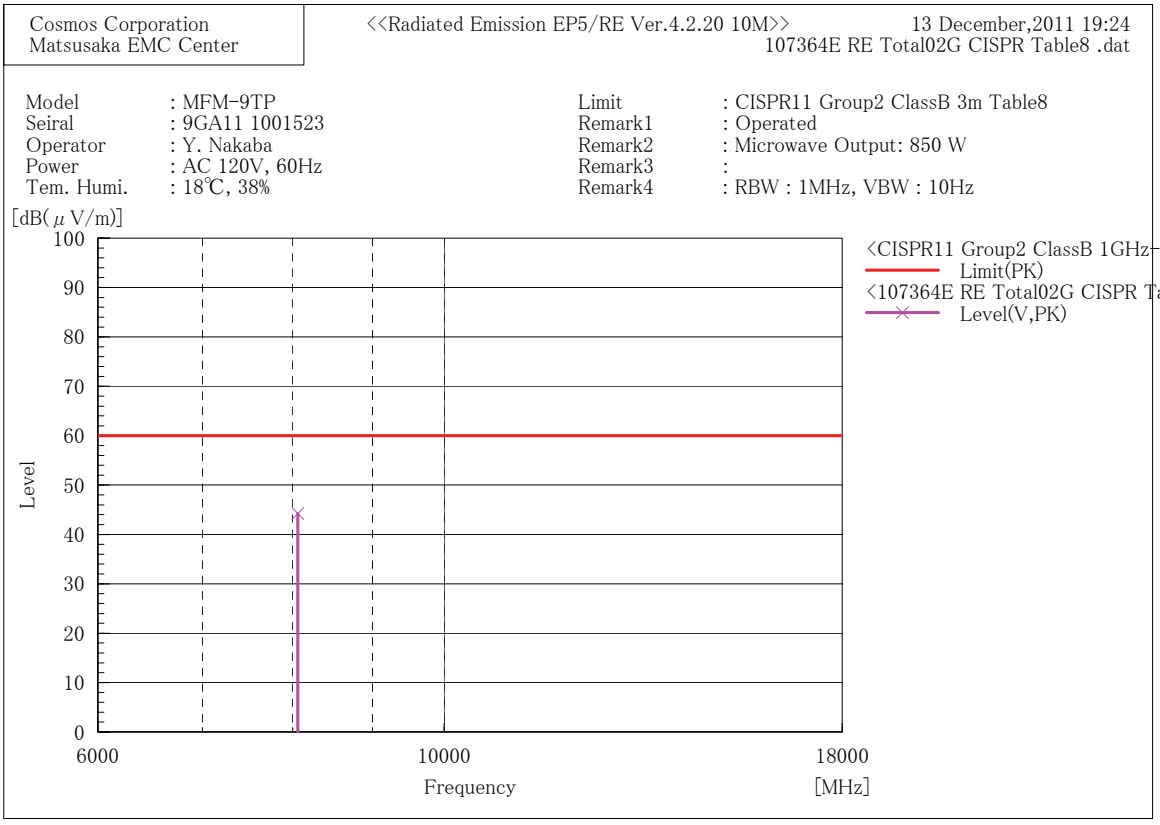
--- Horizontal Polarization (PK)---
No.   Frequency   Reading     c.f       Result       Limit     Margin  Height   Angle
        [MHz]    [dB(μV)] [dB(1/m)] [dB(μV/m)] [dB(μV/m)]   [dB]    [cm]    [° ]
  1   9877.500     51.4       4.6       56.0       60.0       4.0    100.0    60.0

--- Vertical Polarization (PK)---
No.   Frequency   Reading     c.f       Result       Limit     Margin  Height   Angle
        [MHz]    [dB(μV)] [dB(1/m)] [dB(μV/m)] [dB(μV/m)]   [dB]    [cm]    [° ]
  1   8058.750     43.8       0.5       44.3       60.0      15.7    100.0     0.0
```

Appendix C: Emission Test Data (Continued)

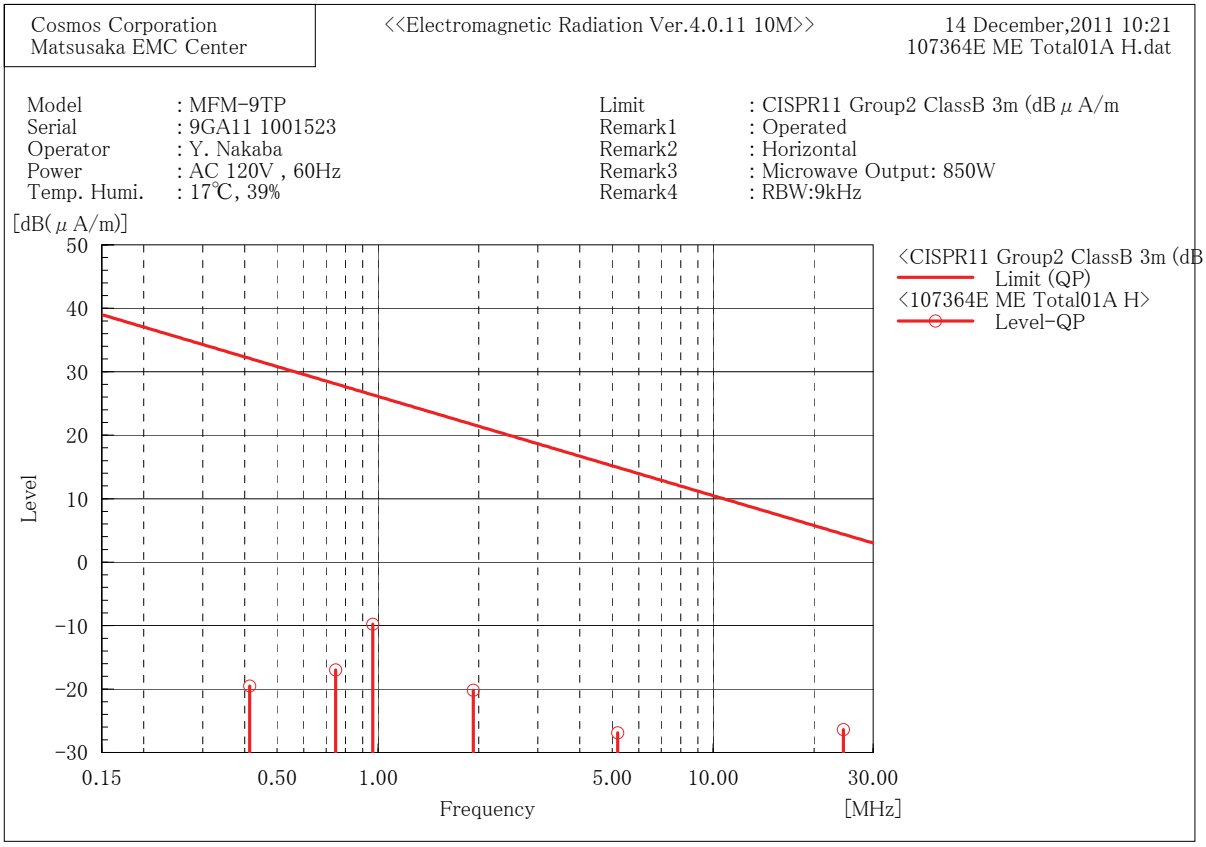
Radiated Emission (Weighted Measurement (6 GHz to 18 GHz)) <Table 8>





Appendix C: Emission Test Data (Continued)

Radiated Emission (0.15 MHz to 30 MHz) <Table 4>



Final Result

No.	Frequency [MHz]	Reading [dB(μV)]	c.f [dB(1/Ωm)]	Result [dB(μA/m)]	Limit [dB(μA/m)]	Margin [dB]
1	0.41445	12.6	-32.1	-19.5	32.1	51.6
2	0.747012	14.9	-31.9	-17.0	28.1	45.1
3	0.964877	22.1	-31.9	-9.8	26.4	36.2
4	1.922645	11.5	-31.7	-20.2	21.7	41.9
5	5.185945	4.3	-31.2	-26.9	14.9	41.8
6	24.4339	2.4	-28.8	-26.4	4.4	30.8

Appendix C: Emission Test Data (Continued)

Conducted Emission <Table 2b>

```
****************************************  Cosmos Corporation  ****************************************
                                  <<Conducted Emission EP5/CE Ver. 4.2.10 SA>>
                                                                        8 December,2011 15:35
                                                                        107364E CE Result02.dat
Limit              : CISPR11 Group2 ClassB Mains Port
Model              : MFM-9TP
Serial.No          : 9GA11 1001523
Operator           : T. Nakaseko
Power              : AC 120V, 60Hz
Temp,Humid         : 20℃, 35%
Remark1            : Operated
Remark2            : Microwave Output: 850W
Remark3            :
Remark4            : RBW:9kHz
********************************************************************************************************
Final Result

--- N Phase ---
No.   Frequency   Reading   Reading     c.f     Result    Result     Limit     Limit     Margin    Margin
                    QP        AV                 QP        AV        QP        AV        QP        AV
        [MHz]   [dB(μV)] [dB(μV)]    [dB]   [dB(μV)] [dB(μV)] [dB(μV)] [dB(μV)]    [dB]      [dB]
  1   0.15248     36.1      12.8     10.2      46.3      23.0      65.9      55.9      19.6      32.9
  2   0.36811     31.2      10.1     10.1      41.3      20.2      58.5      48.5      17.2      28.3
  3   0.79435     28.6       4.6     10.1      38.7      14.7      56.0      46.0      17.3      31.3
  4   0.98692     30.6       4.8     10.1      40.7      14.9      56.0      46.0      15.3      31.1
  5   2.04636     23.0       1.2     10.2      33.2      11.4      56.0      46.0      22.8      34.6
  6   2.85638     31.3       8.0     10.2      41.5      18.2      56.0      46.0      14.5      27.8
  7   8.77992     19.3       0.5     10.4      29.7      10.9      60.0      50.0      30.3      39.1
  8  16.13575     13.6      -1.1     10.4      24.0       9.3      60.0      50.0      36.0      40.7

--- L1 Phase ---
No.   Frequency   Reading   Reading     c.f     Result    Result     Limit     Limit     Margin    Margin
                    QP        AV                 QP        AV        QP        AV        QP        AV
        [MHz]   [dB(μV)] [dB(μV)]    [dB]   [dB(μV)] [dB(μV)] [dB(μV)] [dB(μV)]    [dB]      [dB]
  1    0.1527     36.5      11.0     10.2      46.7      21.2      65.9      55.9      19.2      34.7
  2   0.35228     36.0      11.1     10.1      46.1      21.2      58.9      48.9      12.8      27.7
  3   0.95295     30.5       7.0     10.1      40.6      17.1      56.0      46.0      15.4      28.9
  4   1.61141     30.2       7.5     10.2      40.4      17.7      56.0      46.0      15.6      28.3
  5   2.89635     28.8       6.7     10.2      39.0      16.9      56.0      46.0      17.0      29.1
  6   6.91328     15.9      -0.6     10.3      26.2       9.7      60.0      50.0      33.8      40.3
  7  16.31005     11.9      -2.2     10.4      22.3       8.2      60.0      50.0      37.7      41.8
```

Appendix C: Emission Test Data (Continued)

Conducted Emission <Table 2b>