



AN_A7105_03

Preliminary

Application Note AN_A7105_03

2.4 GHz Antenna Radiation Pattern (Test in ADT)



Document Title

Application Note AN_A7105_03

Revision History

<u>Rev.</u>	<u>History</u>	<u>Issue Date</u>	<u>Remark</u>
0.0	Initial issue	January, 2009	Preliminary
0.1	Change English Company Name	Nov. 30, 2010	Preliminary



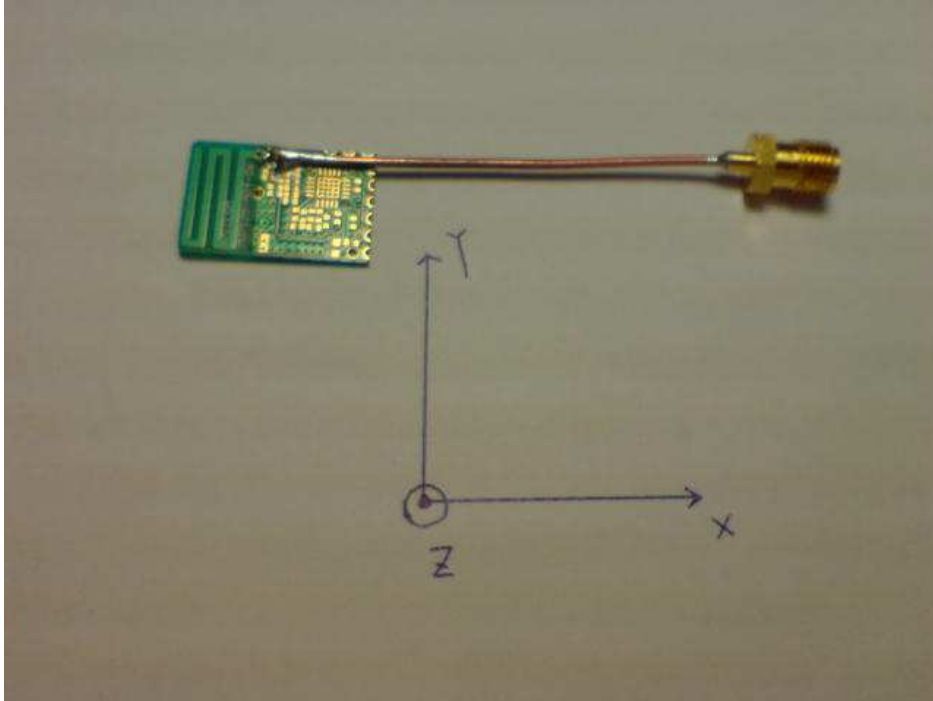
Table of Contents

2. MD7105-A04 Antenna	3
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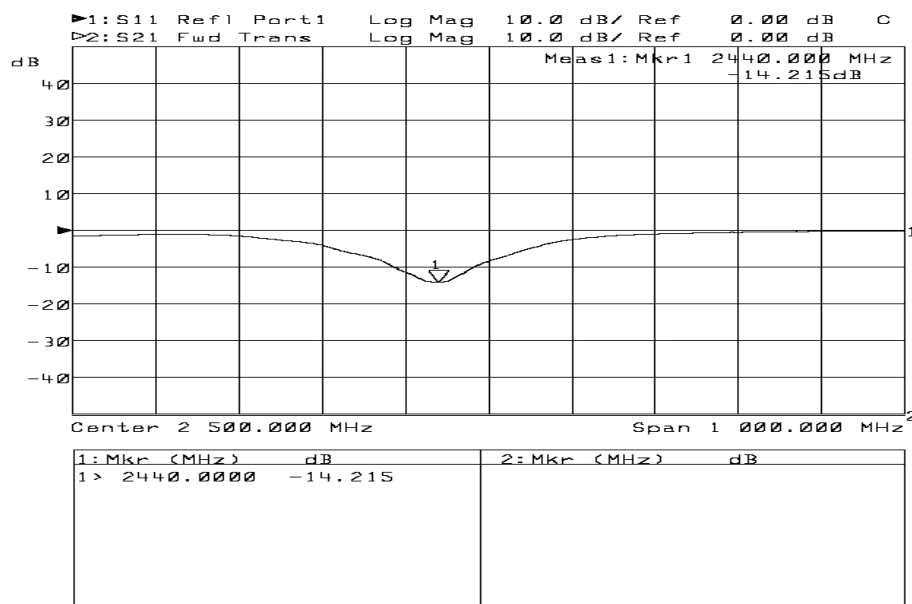
2. MD7105-A04 Antenna

2.1 MD7105-A04(-06) Antenna Picture

This antenna is used in MD7105-A04, A06, A08, MD7125-A04, A08

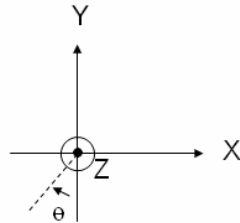


2.2 Antenna S11



2.3 Antenna Pattern (2-D)

2.3.1 XY plane, Horizontal



Horn Antenna



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www.adt.com.hk Hwa Ya Lab & Head Office, Tel +886-3-3183232 / Uniku EMC/RF Lab, Tel +886-2-26052180 / Hsinchu EMC/RF Lab, Tel +886-3-5935343

Brand / Model : MD7125-A04-06
Remark : X-Y
Sample No.
Tested by : Nick

Location: **RF Chamber C**

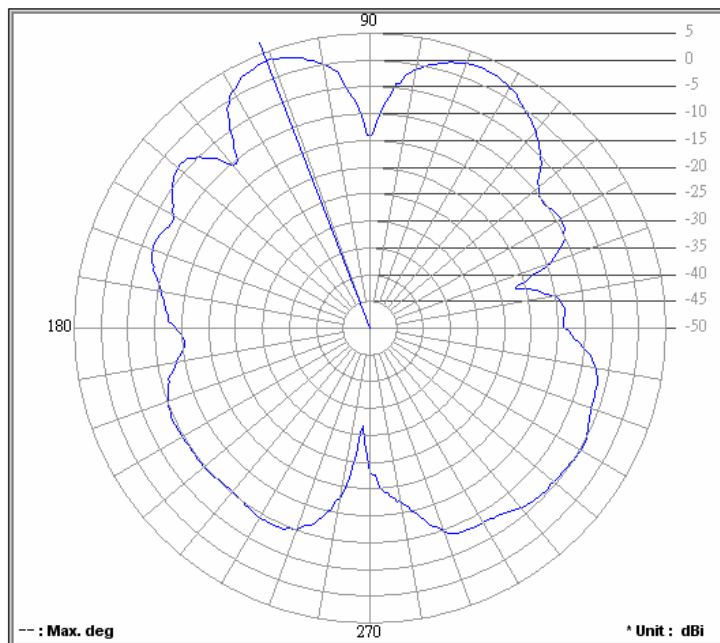
Date: **2008/12/19**

Time: **下午 12:01:16**

Temperature (°C): **20**

Humidity (%): **60**

Approved by:



Frequency (MHz): **2440.00** Antenna Polarity: **Horizontal** Average Value (dBi): **-4.52**

Maximum Value (dBi): **3.41** Maximum Value (degree): **111**

Minimum Value (dBi): **-31.82** Minimum Value (degree): **266**

V6.2

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2.3.2 XY plane, Vertical



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Brand / Model : MD7125-A04-06
Remark : X-Y
Sample No.
Tested by : Nick

Location: **RF Chamber C**

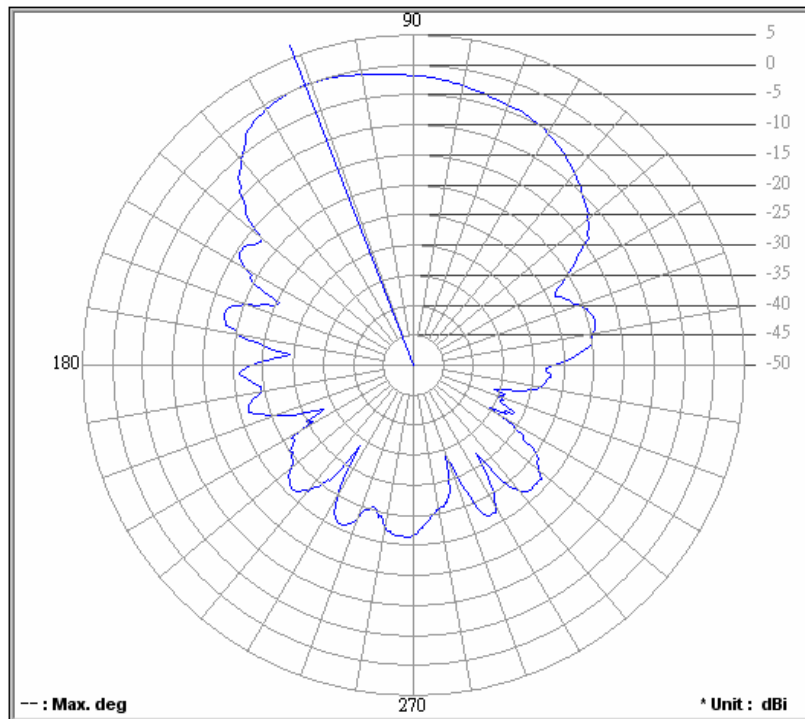
Date: **2008/12/19**

Time: **上午 11:59:22**

Temperature (°C): **20**

Humidity (%): **60**

Approved by:



Frequency (MHz): **2440.00**

Antenna Polarity: **Vertical**

Average Value (dBi): **-8.42**

Maximum Value (dBi): **0.04**

Maximum Value (degree): **111**

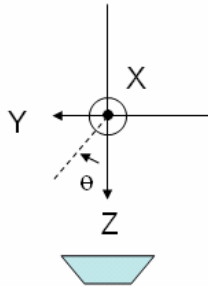
Minimum Value (dBi): **-36.03**

Minimum Value (degree): **343**

V6.2

E:\測試程式\Antenna Pattern V6.1\Graph\1219\12190029.png

2.3.3 YZ plane, Horizontal



Horn Antenna



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Brand / Model : MD7125-A04-06
Remark : Y-Z
Sample No.
Tested by : Nick

Location: **RF Chamber C**

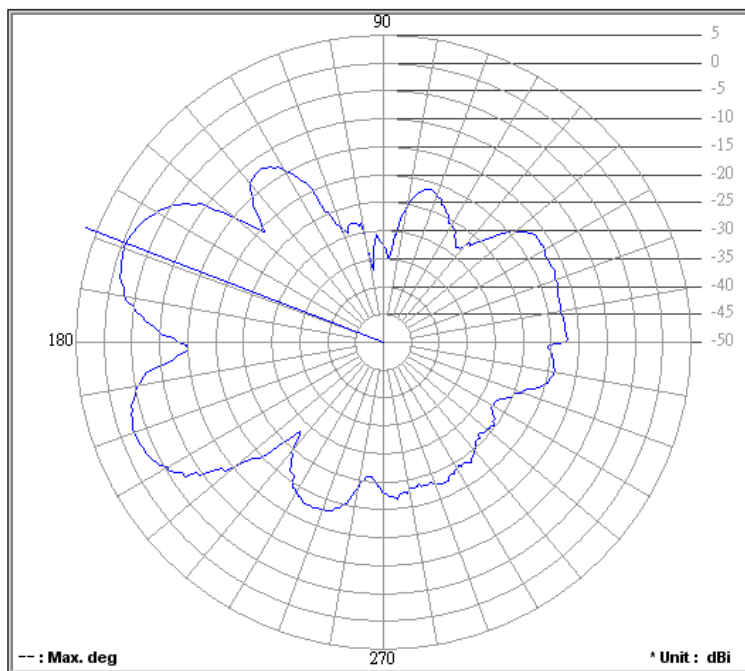
Date: **2008/12/19**

Time: **上午 10:59:10**

Temperature (°C): **20**

Humidity (%): **60**

Approved by:



Frequency (MHz): **2440.00** Antenna Polarity: **Horizontal** Average Value (dBi): **-10.40**

Maximum Value (dBi): **-0.67** Maximum Value (degree): **159**

Minimum Value (dBi): **-36.89** Minimum Value (degree): **98**

V6.2

E:\測試程式\Antenna Pattern V6.1\Graph\1219\12190012.png

2.3.4 YZ plane, Vertical



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Brand / Model : MD7125-A04-06
Remark : Y-Z
Sample No.
Tested by : Nick

Location: **RF Chamber C**

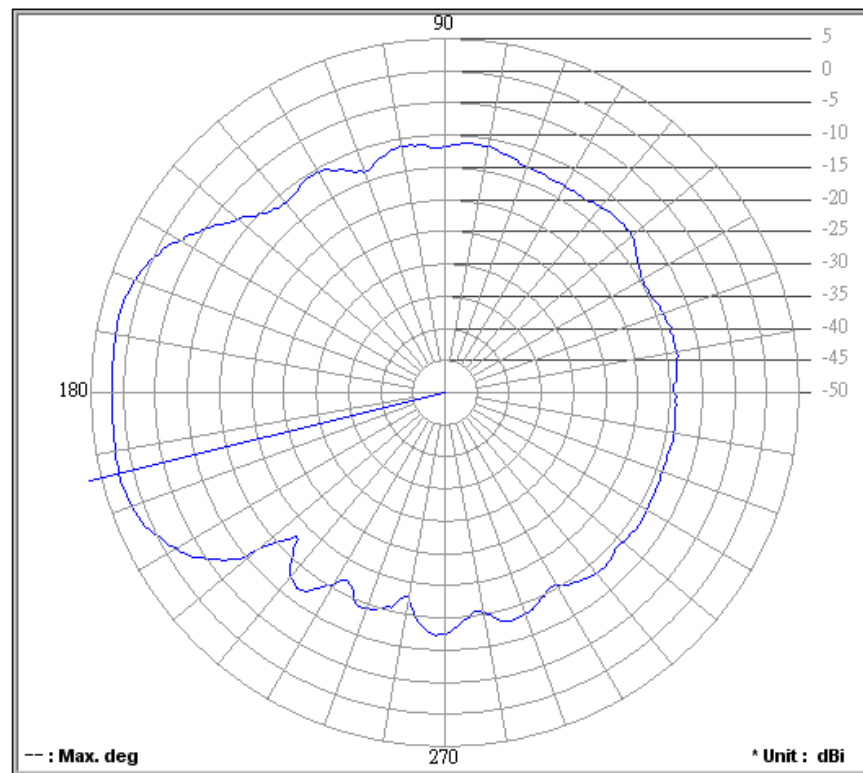
Date: **2008/12/19**

Time: **上午 11:00:31**

Temperature (°C): **20**

Humidity (%): **60**

Approved by:



Frequency (MHz): **2440.00**

Antenna Polarity: **Vertical**

Average Value (dBi): **-5.45**

Maximum Value (dBi): **2.12**

Maximum Value (degree): **194**

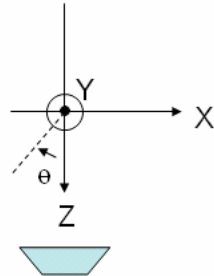
Minimum Value (dBi): **-17.84**

Minimum Value (degree): **224**

V6.2

E:\測試程式\Antenna Pattern V6.1\Graph\1219\12190013.png

2.3.5 XZ plane, Horizontal



Horn Antenna



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Brand / Model : MD7125-A04-06
Remark : X-Z
Sample No.
Tested by : Nick

Location: **RF Chamber C**

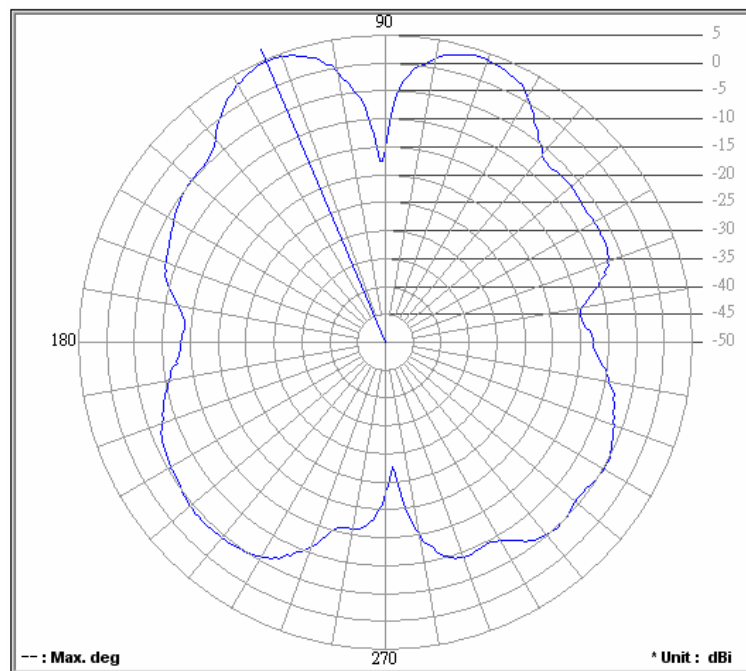
Date: **2008/12/19**

Time: **上午 11:52:06**

Temperature (°C): **20**

Humidity (%): **60**

Approved by:



Frequency (MHz): **2440.00** Antenna Polarity: **Horizontal** Average Value (dBi): **-3.42**

Maximum Value (dBi): **4.63** Maximum Value (degree): **113**

Minimum Value (dBi): **-27.68** Minimum Value (degree): **273**

V6.2

E:\測試程式\Antenna Pattern V6.1\Graph\1219\12190027.png

2.3.6 XZ plane, Vertical



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Brand / Model : MD7125-A04-06
Remark : X-Z
Sample No.
Tested by : Nick

Location: **RF Chamber C**

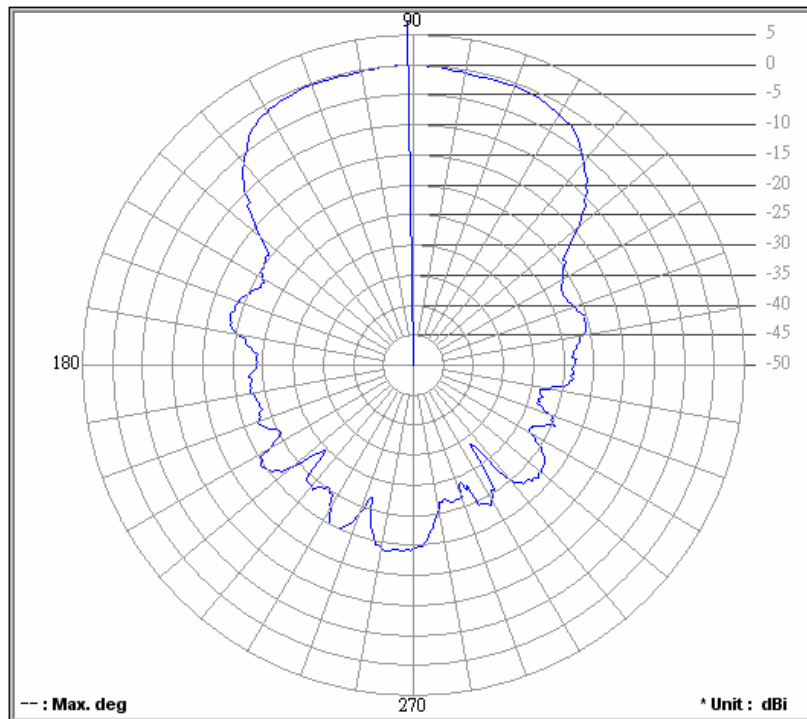
Date: **2008/12/19**

Time: **上午 11:54:10**

Temperature (°C): **20**

Humidity (%): **60**

Approved by:



Frequency (MHz): **2440.00**

Antenna Polarity: **Vertical**

Average Value (dBi): **-7.31**

Maximum Value (dBi): **-0.08**

Maximum Value (degree): **91**

Minimum Value (dBi): **-33.84**

Minimum Value (degree): **306**

V6.2

E:\測試程式\Antenna Pattern V6.1\Graph\1219\12190028.png