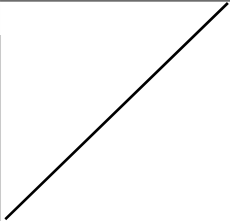
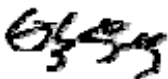


APPROVAL SHEET

**MODEL: D6500
WLAN ANTENNA**

Point–Mobile

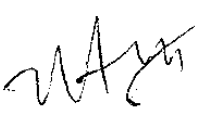
Approval Code : 99300739T0A10

Customer	Point-mobile		
	EN' GR	CHKD	APPD
Customer's Approved			
Approval Date	2009. 10 . 30		2009. 10 . 30

Date of Issue: 2009. 10. 26

CONFIDENTIAL

This Document contains confidential and proprietary information,
cannot discourse to third party without the prior written Authorization of Mobinus

Part Division	Mechanical Part	Electrical Part	Approval
			
	10 / 26	10 / 26	10 / 26
Part Name	MW0739T0A		
Model Name	D6500		

CONTENTS --

1. Revision History
2. General Application
3. Technical Specification
 - 3.1 Electrical Specification
 - 3.2 Mechanical Specification
4. Measurement Data
 - 4.1 VSWR & Smith Chart
 - 4.2 Test Result (3D Efficiency)
 - 4.3 Radiation Pattern
5. Reliability Specification
6. Packing Specification
7. Drawing

1. Revision History

NO.	Before	After	Reason	Date
1	V1.0	V1.1	Antenna Pattern 변경 Antenna Color 변경(Black → Blue)	09.10.26
2				
3				
4				
5				
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				
16				
17				

2. General Application

This document specifies the chip antenna for the mobile communication terminal.

Model Number	MW0739T0A
Application	WLAN

3. Technical Specification

3.1 Electrical Specification

No	Item	Specification	Remarks
1	Frequency Range	2.4GHz ~ 2.5GHz	
2	VSWR	2:1	
3	Impedance	50 Ω	
4	3D Efficiency	Board:55%, Set:50%	
5	Polarization	Linear	
6	Radiation Pattern	Omni directional	

3.2 Mechanical Specification

No	Item	Specification	Remarks
1	Dimension	12.5 * 14.8 * 2 (H) mm	
2	Operating Temperature	-30℃ ~ +80℃	
3	Operating Humidity	10% ~ 90%	
4	Weight	0.5g	
5	Connector Type	Manual solder	

4. Measurement Data

4.1 VSWR & Smith Chart

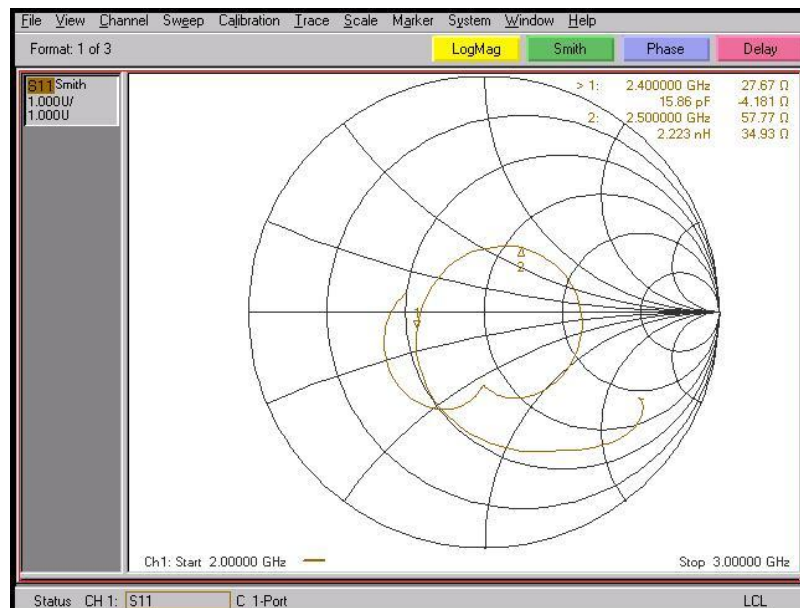


Fig 2. VSWR & Smith Chart

4.2 Test Result (3D Efficiency)

	1	2	3	4	5	6	7	8	9	10	11
Frequency(MHz)	2400	2410	2420	2430	2440	2450	2460	2470	2480	2490	2500
Efficiency(dB)	-3.42	-3.30	-3.20	-3.22	-3.23	-3.57	-3.33	-3.21	-2.85	-3.43	-3.34
Efficiency(%)	45.52	46.78	47.90	47.65	47.52	43.92	46.42	47.81	51.93	45.39	46.34
TRG(dB)	-3.42	-3.30	-3.20	-3.22	-3.23	-3.57	-3.33	-3.21	-2.85	-3.43	-3.34
TRG _{data} (dB)	-6.96	-6.96	-7.17	-7.16	-7.01	-7.37	-7.71	-7.05	-6.67	-7.55	-7.18
TRG _{PH} (dB)	-5.95	-5.74	-5.42	-5.47	-5.59	-5.92	-5.30	-5.51	-5.17	-5.56	-5.65
UHRG(dB)	-6.01	-5.94	-5.85	-5.89	-5.91	-6.27	-6.03	-5.88	-5.56	-6.20	-6.11
UHRG/TRG(%)	55.01	54.48	54.28	54.11	53.91	53.74	53.68	54.00	53.57	52.83	52.81
H-Plane	-8.40	-8.38	-8.55	-8.50	-8.29	-8.56	-8.79	-8.03	-7.52	-8.22	-7.63
E1-Plane, AVG(dB)	-4.81	-4.70	-4.78	-4.66	-4.47	-4.81	-5.18	-4.66	-4.49	-5.48	-5.24
E2-Plane, AVG(dB)	-8.03	-8.23	-8.58	-8.74	-8.69	-9.06	-9.30	-8.68	-8.39	-9.27	-8.68
Peak Gain(dB)	-0.06	-0.02	-0.16	-0.33	-0.46	-0.85	-0.11	-0.11	0.39	0.11	0.22
Directivity(dB)	3.36	3.28	3.03	2.89	2.78	2.73	3.22	3.10	3.24	3.54	3.56
Minimum Gain(dB)	-7.74	-7.40	-7.44	-7.75	-7.92	-8.47	-9.00	-8.67	-8.31	-9.29	-9.71
Test Condition											
Antenna Type											
Average Efficiency	-3.26 dB, 47.18 %										

4.3 Radiation Pattern

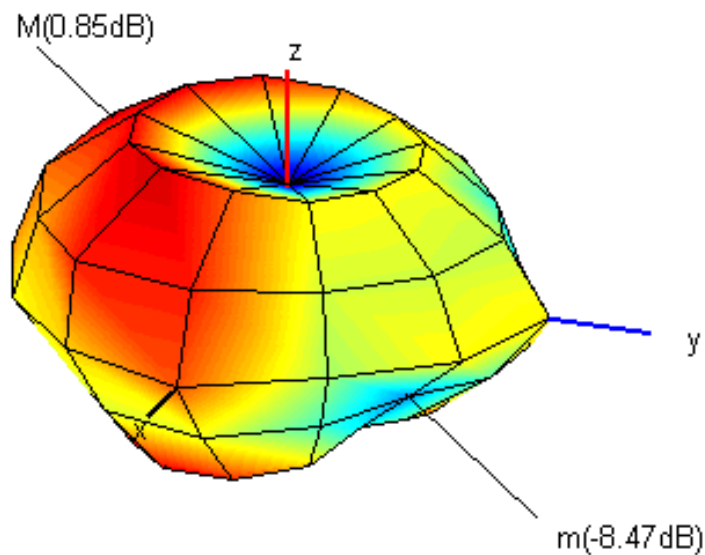


Fig 3. Radiation Pattern

	Efficiency (%)	Efficiency (dB)	UHRG(dB)	Peak Gain
Radiation	47%	-3.26	-6.27	-0.85

5. Reliability Specification

No	Item	Conditions and Method
1	Temperature Shock	● Perform 10 cycles as follow ■ High Temp.: 30min, +85°C ■ Low Temp.: 30min, -40°C ■ Repeat : 10 times ● Stabilize at room temperature for measurement
2	Dry Heat Test	● Dwell in +85°C chamber for 72 hours ● Stabilize at room temperature for measurement
3	Low Temperature Test	● Dwell in -40°C chamber for 72 hours ● Stabilize at room temperature for measurement
4	Humidity Test	● Dwell in test chamber at +50C and 95% RH for 24 hours ● Stabilize at room temperature for measurement
5	Drop Test	● Conditions ■ Drop height: 1.5 m ■ Drop angle: 45 ° / 90 ° ■ Drop cycle : Each 5 times ■ Weight : 150 g
6	Salt Spray Test	● After exposing to 5% sodium atmosphere at +35° C for 72 hours and washing pure water, test within 2 hours

6. Packing Specification

Item	Quantity	Materials	Remarks
Tray	100EA	P.S/PET	

